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• January-February 2010

Maintaining a balance
in an era of
persistent conflict

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Contents

January-February 2010

Featured



Photo courtesy of LTC Steve Wertz (U.S. Army)

While many of our comrades from around the military continue to fight terrorism in Iraq and Afghanistan, 2nd Battalion, 18th Field Artillery Regiment spent the past 15 months fighting the same fight in a little-discussed area of the world that is ripe for the spread of extremism.

Sustain

Page 7 **Staying in the Game: Prevention of low back injuries**
By MAJ G. Damon Wells

Prepare

Page 10 **Information Engagement: Operations in a permissive environment**
By MAJ Lyndon D. Jones

Page 14 **Engaging the media**
By Jennifer Blais

Reset

Page 17 Mind Fitness: Improving operational effectiveness and building warrior resilience
By Elizabeth A. Stanley and Amishi P. Jha

Page 25 Saving Soldiers from suicide: Army seeks to stamp out stigma
By Kim Reischling

Page 27 Restoring balance through reintegration
By LTC Michael T. Morrissey

Transform

Page 39 Full-spectrum artillery
By MAJ Richard L. Scott

Page 43 Eating Soup with a Spoon: The employment of Fires brigades in the Global War on Terrorism
By LTC John C. Hale

Page 57 Fire support for the special operations task force
By Majors Jason D. Adams, Deric Holbrook and Seth Knazovich

Page 61 Targeting for a maneuver task force
By CPT Justino Lopez Jr.

Page 65 Winning World War IV: Part II of II
By MAJ David Haynes

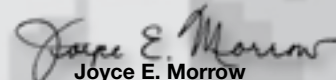
ON THE COVER: Soldiers get a first hand view of the land from on top of a ridge near Forward Operation Base Lane, Zabul province, Afghanistan, Feb. 21, 2009. (Photo by SSG Adam Mancini, U.S. Army)

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Fit to fight: Maintaining a balance

By MG David D. Halverson,
Commanding General of the Fires Center of Excellence



"That is what we have to do to rebalance the Army – sustain, prepare, reset and transform. We must do that while we are at war, and it will not be easy, but it is essential to keep the Army the 'Strength of the Nation.'"

GEN George W. Casey, Chief of Staff of the Army

After nearly nine years of war, attaining and maintaining balance is one of the biggest challenges facing our Army today. We are in the midst of a persistent conflict, which is the third-longest in America's history and the longest ever fought by an all-volunteer force.

The Army Chief of Staff, GEN George W. Casey Jr., has a plan to put the Army back in balance, but it is going to take a few years to get there. To execute the chief of staff's plan, he has asked we focus on four areas: sustain, prepare, reset and transform – simultaneously – of course that in and of itself requires balance. Our Fires Force is one of the highest deployed forces in the U.S. Army, so we must understand and adapt to maintain balance.

Soldiers and leaders are the key to an Army that is defined as a "people" business. We can break equipment, we can lose contracts for a new weapon or computer, but we cannot operate without physically and mentally tough warfighters and families. The "total" or "whole" Soldier is one who maintains a good balance between his or her important tenants, such as family, community and mental, physical and spiritual fitness. This balance will enable the Soldiers to reach their full potential and recognize their greatest growth benefiting the Soldier, their family and our all important, all volunteer force's own sustainment.

Sustain. First and foremost, we want to ensure our people are well-cared for and have an opportunity to develop themselves whether they are at home, at work, on the battlefield or while serving in garrison. It is important our forces maintain a consistent, healthy lifestyle in mind, body and spirit, regardless of the situation in which they find themselves.

Our experiences at war have shown us we must better prepare our Fires Soldiers and their families to find their balance and to persevere with the challenges inherent to military service. With the start of Army initiatives such as the Army Family Covenant and the implementation of the Comprehensive Soldier Fitness program, we are on track to providing opportunities for our war fighting force community to excel and embrace the best of what military life has to offer. Additionally, the installation Family and Morale, Welfare and Recreation offers a variety of activities to help our Soldiers and their families balance their lives through recreational, social and educational events – I encourage you to take advantage of all

of them.

The bottom line is that if we don't take care of ourselves, we won't be able to take care of each other, and every person, Soldier or civilian, is a vital link. This is the reason we are so successful, because without the support we give each other we cannot succeed. Therefore, as we build upon our successes, we owe our Soldiers the very best equipment and systems we can develop and cannot allow innovation to slip away. This is extremely important for our Fires Soldiers, especially after doing directed missions. As a Fires community we must enlist, access and retain the highest quality leaders. This will ensure we are able to address the complexities of persistent conflict now and in the future.

Prepare. As a Fires Force, we are ensuring both our field artillery and air defense artillery Soldiers have the right training and equipment to do their jobs. The Fires Center of Excellence is striving to integrate key aspects of the two branches, while aspiring for unprecedented offensive and defensive Fires capabilities. We have emerging missions now, and tremendous potential for synergy between the two branches in supporting the warfighter. How the branches and Fires Center of Excellence approach modernization to address these emerging missions will shape the Fires Center of Excellence and the Army as a whole for years to come. We must get back to doing some of our core competencies.

Time back from the fight assists training and learning in new and effective ways which are key to our future as an Army. On Dec. 17, 2009, the Army Capstone Concept was released and earlier in the month the Army Leader Development Program was signed. These documents are shaping our thoughts on the future fight, and how we transform from current learning models to new systems is of vital importance in terms of funds and time. This is not business as usual and it requires the combined knowledge and efforts of the entire Fires Force be captured as we move through the Army Force Generation cycle. Also, we must look across the entire doctrine, organization, training, materiel, leadership and education, personnel and facilities spectrum to address our needs.

Reset. Major combat and stability operations in Iraq and Afghanistan are placing tremendous demands on our equipment. Amid the constant demands of war, the equipment is aging far more rapidly than projected. Because of the higher operating tempo, rough desert environments and limited maintenance available in theater, equipment life has been dramatically shortened.

"The bottom line is that if we don't take care of ourselves, we won't be able to take care of each other, and every person, Soldier or civilian, is a vital link."

To maintain their operational effectiveness and to be prepared to deploy when needed, units must ensure their equipment is returned to optimal condition, or “reset,” after they redeploy from a combat or stability operation. Reset not only involves equipment; it involves our Soldiers and their family members. With the current strategic environment and a future of projected conflict, it is more important than ever to reset Soldiers, families and equipment properly.

New technologies and changing enemy tactics, techniques and procedures require new equipment, new systems and new ideas about how we fight and win. Reset is the time to capture those lessons learned and turn them into new tactics, techniques and procedures for the next deploying unit. Reset provides leaders time, although not enough in many cases, to look back and analyze what took place and why. For example, where were the capability gaps, where did our Soldiers miss a sign or piece of critical information that better training or a different way of training would have caught?

So along those notes, it is imperative every Fires professional strives to be a student of their trade and branch. In an information age, there are limitless opportunities to learn about what’s new, what’s happening in the Fires profession and to share what you know – don’t fire and forget – stay engaged. The Fires Center of Excellence (FCOE) is managing a series of social media applications to increase collaboration between the war fighter and the FCoE. From the Fires Knowledge Network to Facebook to the Combined Arms Center Blog, we need warriors’ input as to how our systems, training and education are working and how we are doing at supporting the families.

We must not only be schooled in the basics of our jobs, but we also must become adaptive leaders who are proficient in joint and combined expeditionary warfare, continuous full-spectrum operations, and leaders who are culturally astute and resilient to uncertain and ambiguous environments. Being a professional means more than gaining military occupational specialty skills, it also means taking advantage of outside college courses. That is why as leaders, we must provide every opportunity for our Soldiers to participate in civilian training and college education, avenues of self-development and experience to continue to achieve success in all areas.

Yes, we can and should teach ourselves and our Soldiers how to accomplish the mission by Army regulations, but these other types of experiences and education can give them the insight and the maturity to know when is appropriate to create other avenues of approach.

Transform. Critical for the success of Fires is the integration of the systems of the future while sustaining and upgrading our current weapons and enabling systems that support the current fight. In sync with bringing new systems online, we must have the capability to train more effectively and efficiently through the use of simulations and at combat training centers. This past year has seen several recently-fielded revolutionary munitions and systems, all of which enhance our ability as Fires professionals to integrate timely and effective lethal and nonlethal fires in support of the joint and combined maneuver commander. No single platform, including vehicles, operates alone. As a result, Army modernization will be undertaken while maintaining equipment of various classes and ages – a constant mix of upgraded legacy systems and new platforms.

Wars now and in the future will almost certainly involve joint and combined operations. We can see this in Afghanistan today where the U.S. Army is not fighting alone. Joint and combined operations have become the norm. The Fires Center of Excellence continually looks for opportunities to bring joint and combined training here because it exposes our Soldiers, and the leaders we are developing, to the operational environment they will be exposed to in the real fight.

This was certainly the case with hosting Forging Sabre 2009. Because Fort Sill is the home of the Fires Center of Excellence and the Field Artillery School, a Singaporean air force contingent traveled to Fort Sill to validate their training with a live-fire exercise, which incorporated both U.S. and Singaporean forces. It made sense for these new High-Mobility Artillery Rocket System soldiers and airmen to validate their training with the U.S. Army’s fires experts because Fort Sill has the best joint and combined Fires training capabilities available. It also gives our Fires Soldiers valuable experience training in a combined environment. It was a win-win for both countries, and is the first of several historical training opportunities to be held here at the Fires Center of Excellence.

It’s important to note, transformation won’t stop with incorporating joint and combined fighting opportunities. Transformation is accelerating at an all-time fevered pitch and has a new emphasis on homeland security and force protection to include preparing for hybrid warfare. Hybrid warfare is no longer a concept of the future, and we will continue to see conflict with blended or mixed warfare including conventional, guerrilla, counterinsurgency and terrorism. Hybrid warfare constantly shifts along the conflict continuum and will demand more dual-use and multi-role platforms. Hybrid conflict will also require new and creative approaches to operational problems, including the need for leaders to consider the formation of ad hoc, modular composite units where elements from other units could be attached depending on the particular mission.

That’s why we are revamping all our courses and incorporating the idea of a Joint Combined Fires University, where it supports the pillars of a “university” as we define it, such as “education, research and development, currency and outreach” – to respond to this new way of fighting.

Hence the 2010 January-February edition of the *Fires Bulletin* is dedicated to “maintaining a balance in an era of persistent conflict.” Throughout this issue of the *Fires Bulletin*, authors discuss “maintaining balance” and touch on each area of the CSA’s imperatives. *Sustain* focuses on the upkeep of our all-volunteer force. *Prepare* spotlights pre-deployment training. *Reset* brushes on the re-integration and dealing with our “in-ranks” enemy, suicide. Lastly, a look at *transform* as it touches on new tactics, techniques and procedures and new systems. The collection of articles contained in this edition highlights some of the best ideas and new ideologies in the Fires profession. It is a preverbal “how to” guide of what it takes to maintain a balance in an ever-changing era of persistent conflict.

It has never been a more exciting time to be a Fires professional. So as we go about sustaining, preparing, resetting and transforming – we all must be involved and we all must share our combined wisdom.

Fit to Fight – Fires Strong!

Our African Adventure By LTC Steve Wertz



SSG Eduardo Alegria of B Battery, 2nd Battalion, 18th Field Artillery Regiment, discusses procedures with Ethiopian soldiers and civilians during a medical capabilities operation in Ethiopia. (Photo courtesy of LTC Steve Wertz, U.S. Army)

ALTHOUGH AFGHANISTAN AND IRAQ ARE AT THE EPICENTER OF AMERICA'S WAR ON TERROR, TERRORIST GROUPS THREATEN OTHER PARTS OF THE WORLD AS WELL. ONE OF THE MOST DANGEROUS IS THE GREATER HORN OF AFRICA REGION - DJIBOUTI, ERITREA, ETHIOPIA, KENYA, SOMALIA AND THE SUDAN, ALONG WITH YEMEN, THEIR VOLATILE NEIGHBOR. AL QAEDA HAS ALREADY STRUCK IN THE REGION, AND THE AREA'S COMPLEX HISTORY, SHARED POVERTY, POOR GOVERNANCE, UNDERDEVELOPMENT AND RENOWNED RESISTANCE AGAINST WESTERN COLONIZERS HAVE CREATED AN INTRICATE WEB OF OPPORTUNITY FOR POTENTIAL TERRORISTS."

BATTLING TERRORISM IN THE HORN OF AFRICA,

EDITED BY ROBERT I. ROTBERG

While many of our comrades from around the military continue to fight terrorism in Iraq and Afghanistan, 2nd Battalion, 18th Field Artillery Regiment spent the past 15 months fighting the same fight in a little-discussed area of the world that is ripe for the spread of extremism. The Horn of Africa is comprised of multiple countries, ethnicities, religious beliefs, government forms and cultures. Due to the relative instability of many countries in the Horn of Africa, it has been a target for extremist groups in recent years.

Indirect approach. The war on terrorism in the Horn of Africa is being waged much differently than in Iraq and Afghanistan. The majority of the U.S. government's efforts in the Horn of Africa are being fought, not with bullets, but with ideas. Influence is critical. A common motto at Combined Joint Task Force-Horn of Africa is "Helping Africans solve African challenges."

The United States learned from its difficulties in Somalia in 1993 that direct military intervention is not always the best way to execute operations in this part of the world. In 2002, Combined Joint Task Force-Horn of Africa was established under U.S. Central Command in the small country of Djibouti, just off of the Gulf of Aden, as a mostly U.S. Marine Corps-led joint headquarters. Since its infancy, Combined Joint Task Force-Horn of Africa has evolved into a full-fledged joint task force with multiple lines of operation. The task force provides mentorship to multiple militaries in the region in both ground and maritime operations; provides medical, dental and veterinary support for the population; and builds schools, dairies, livestock slaughterhouses, bridges, roads, wells and other necessities in this poverty-stricken region. In October 2008, the task force was assigned to U.S. Africa Command.

2nd Battalion, 18th Field Artillery Regiment deployed to Africa in March and May 2008. The battalion deployed under two infantry company requests for forces. Initially, the battalion and U.S. Central Command requested that the requests for forces be consolidated and that the entire battalion deploy. However, this request was denied. Despite not officially being on a request for forces, the battalion deployed its command element and a small staff to execute tactical command and control of the unit. The rest of the battalion task organized from its Multiple-Launch Rocket System battalion structure into two infantry companies that deployed in accordance with its latest arrival dates. Deploying the command and staff elements proved

to be one of the most valuable decisions the battalion made. The Combined Joint Task Force-Horn of Africa staff is a mostly U.S. Navy-led joint staff that produces primarily operational-level staff work. The battalion staff's presence allowed us to take operational guidance from the joint staff and turn it into tactical tasks for our batteries. Deploying the staff also allowed us to oversee the logistical needs of our Soldiers in Djibouti and throughout East Africa.

2nd Battalion, 18th Field Artillery Regiment was the largest maneuver unit in Combined Joint Task Force-Horn of Africa and the largest U.S. military formation inside Africa. Our primary responsibilities were foreign military training, force protection for civil-military projects and joint combat search and rescue throughout the area of responsibility. During the last five months of our deployment, we also executed security operations for Camp Lemonier, Djibouti.

Foreign military training. Perhaps the most exciting and challenging mission the battalion executed during our deployment was training and mentoring foreign militaries. We executed this task in a myriad of ways in multiple countries. The following paragraphs describe some of our larger foreign military training efforts.

Ugandan NCO Academy. The battalion provided NCOs to mentor instructors and students in the Ugandan Junior and Senior NCO Academies in Jinja, Uganda. One of Combined Joint Task Force-Horn of Africa's primary operational objectives is NCO professionalization within its area of responsibility. Most of the African countries that we worked alongside have very officer-centric armies. When soldiers show potential for leadership, they are made officers. However after observing the U.S. Army, many countries have begun to show a desire to professionalize their NCO corps. Uganda is one of the primary countries where these efforts are taking fruit.

Our NCOs in Jinja actually taught about 25 percent of the courses in the two academies and mentored Ugandan instructors during their remaining instruction. Although our expertise was requested and desired, it was important that these courses had a Ugandan face on them.

Following the first iteration of the Junior and Senior NCO Academies, our instructor team developed an instructor qualification course for the Ugandan instructors. During this course, our team introduced new instructional subjects and mentored the Ugandans on their instructional techniques. This ad-hoc course will likely have the most

lasting impact of all our efforts in Uganda. Improving Ugandan instruction through Ugandan instructors is truly paving the way for the future of the Ugandan NCO corps.

Ugandan Counter Terrorism Course. Along the shores of Lake Victoria, our battalion provided an instructional team for what the Ugandans called their Counter Terrorism Course. In reality, this 16-week course, located in Kasenyi, Uganda, was a very basic infantry course made up of soldiers from throughout the Ugandan People's Defense Force. 2nd Battalion, 18th Field Artillery Regiment NCOs were the primary instructors for this entire course. They were responsible for the Ugandan soldiers from sun-up until the duty day was complete. Our instructional team taught these young Ugandans basic marksmanship, physical fitness, basic soldier skills and some basic and advanced infantry tactics, techniques and procedures.

Kenyan Warrior Leaders Course. In the beautiful Mount Kenya region, our Soldiers developed and executed what we called the "Kenyan Warrior Leaders Course" for the Kenyan army's 20th Parachute Regiment. Our Soldiers got the full wilderness experience by living among monkeys, antelope and other wildlife in the bush along with their Kenyan counterparts.

Ethiopian NCO Academy. 2nd Battalion, 18th Field Artillery Regiment NCOs developed and taught an instructional qualification course to the cadre at the Ethiopian NCO Academy in Tolay, Ethiopia. This venture was one of Combined Joint

Task Force-Horn of Africa's most high profile missions because it was the first U.S. military venture with the Ethiopian military in many years. Our NCOs deployed to this remote area of Ethiopia on short notice, believing they would simply be advisors to the Ethiopian instructors. A week after their arrival, they were teaching the Ethiopian cadre eight hours a day, five days a week. Not only did our instructional team develop a program of instruction for the instructor course while simultaneously teaching, they also developed programs of instruction for the newly created Master Sergeant and Sergeant Major's Course. After one iteration of the instructor course, our instructors switched gears and began instructing the Sergeant Major Cadre Course.

Liberia. Although not in the Combined Joint Task Force-Horn of Africa area of responsibility, the battalion also contributed an instructor team to the U.S. Africa Command's foreign military training mission in Liberia. Following a lengthy internal conflict, this war-torn nation has begun rebuilding. In the past two years, Liberia's military has started over from the ground floor. 2nd Battalion, 18th Field Artillery Regiment instructors mentored infantry battalion leadership at the battalion, company and platoon levels, and provided medical subject matter expertise and training in these rebuilding efforts.

East Africa Stand-by Brigade. The U.S. government provides training assistance to various African countries through a program called Africa Contingency Operations



SSG Christopher Crocker and SSG Steven Teets of C Battery, 2nd Battalion, 18th Field Artillery Regiment, instruct students from the Ugandan People's Defense Force on squad-level infantry tactics at the Ugandan Counter Terrorism Course in Kasenyi, Uganda. (Photo courtesy of LTC Steve Wertz, U.S. Army)

and Training Assistance. The U.S. State Department led program, which couples military contractors and active-duty military members, provides training and assistance to African militaries. This training usually occurs before African nations send forces to execute stability operations in locations such as Sudan and Somalia.

In the past few years, the African Union has developed five regional security forces to be deployed regionally should conflict arise. The East Africa Stand-by Brigade was in the conceptual phase when 2nd Battalion, 18th Field Artillery Regiment deployed, but throughout our deployment the battalion's contributions enabled this concept to become a reality. The East Africa Stand-by Brigade staff consists of officers and NCOs from the 13 member nations. Should situations arise that require the deployment of this force, member nations from within the East Africa Stand-by Brigade will contribute tactical forces to the mission.

In assisting with this mission, we contributed one of our majors to work full-time with the British Peace Security Team in Karen, Kenya. This officer, initially MAJ Todd Mefford and later MAJ Mark Simpson, worked as a planner in developing several training and certification exercises for the East Africa Stand-by Brigade staff. We also contributed command, operations and logistics officers and NCOs to mentor the East Africa Stand-by Brigade staff during several Africa Contingency Operations and Training Assistance Program training exercises and, ultimately, the staff's certification.

This was an incredibly rewarding venture for both the African soldiers and 2nd Battalion, 18th Field Artillery Regiment personnel. As you can imagine, taking officers from multiple countries with different military philosophies and doctrines and forming a trained, cohesive staff can be difficult. Although many challenges lie ahead for the East Africa Stand-by Brigade, we feel very satisfied the work done over the past 15 months has allowed East Africa to make huge strides in its security.

Other Africa Contingency Operations and Training Assistance Program missions. Besides working with the East Africa Stand-by Brigade, we also contributed instructor teams to other Africa Contingency Operations and Training Assistance Program training missions in Ethiopia and Rwanda. These instructors

worked with battalion Soldiers and their staffs to prepare for regional deployments to Darfur and southern Sudan.

Force protection. A second major mission the battalion executed during its deployment was force protection for various operations throughout the area of responsibility. Due to the lack of resources in most areas within the Horn of Africa, the U.S. government, through the military, is executing numerous civil-military projects. 2nd Battalion, 18th Field Artillery Regiment Soldiers provided security for civil affairs teams, Army well-drillers and Navy Seabees who are executing these projects, which include the construction of schools, livestock slaughterhouses, wells, bridges and many other facilities. Medical, dental and veterinary assistance was also provided to the people of this region through Combined Joint Task Force-Horn of Africa. Besides executing force protection for each of these operations, we also provided medics for multiple medical capabilities operations and Soldiers simply to hold animals during veterinary capabilities operations.

The battalion's two most prominent enduring force protection missions were located in Dire Dawa, Ethiopia, and Manda Bay, Kenya. In Dire Dawa, the battalion deployed a sizable force protection team to assist multiple civil affairs and Navy Seabee missions in eastern Ethiopia. In Manda Bay, *Mission Ready* Soldiers provided camp security for a small U.S. contingency operating location on the northeast coast of Kenya. Our Soldiers at Manda Bay also provided force protection for Army civil affairs teams operating in the region. Although these two missions endured for our entire deployment, the battalion also executed force protection for other missions in Djibouti, Ethiopia, Uganda, Kenya and Tanzania.

Joint combat search and rescue. *Mission Ready* Soldiers executed the important mission of fixed-wing and rotary wing security for Combined Joint Task Force-Horn of Africa's joint combat search and rescue operations. Working closely with Air Force parajumpers assigned to the command, a platoon of *Mission Ready* Soldiers executed this mission for the entirety of our deployment. This challenging mission was great for our Soldiers; they constantly trained in advanced infantry tactics and executed numerous training and real-world missions.

Camp security. Although camp security was not initially one of our assigned missions, circumstances required that the battalion execute this important task during the final five months of our deployment. Marines have executed security operations for Camp Lemonnier and the U.S. Embassy in Djibouti since its origination in 2002. However, due to global commitments elsewhere, the U.S. Marine Corps ceased executing this mission in April 2009. No replacements were provided to perform this task. Although the threat to our operating location in Djibouti was quite different from the threat in Iraq or Afghanistan, the camp is located six miles from the border of Somalia. Thus, security remains a very important task. Combined Joint Task Force-Horn of Africa asked our battalion to execute this mission until the force assigned to this task arrived in August. However, the command also required that we continue most of our missions in East Africa as well as our joint combat search and rescue mission. Executing this mission with the forces and equipment on hand required detailed staff work, creative manning solutions and a shift in training focus. We completely reorganized our forces, redeployed and moved Soldiers all over the area of responsibility and re-trained our Soldiers on new tasks. Ultimately, we were able to successfully execute this task as well as continue our work throughout the area of responsibility.

Important lessons learned. During the 2009 Year of the NCO, nowhere were the contributions of U.S. Army NCOs more apparent than in our operations in Africa. To call 2nd Battalion, 18th Field Artillery Regiment's operations decentralized is an understatement. While our battalion's command and staff played a very important role in developing force structure and materials and providing logistical support for our teams in East Africa, as well as filling a huge tactical command and control void for Combined Joint Task Force-Horn of Africa, we did not direct the daily operations of our deployed forces. This task was left to the junior officers and NCOs that led our teams. For the majority of our missions, sergeants first class, staff sergeants, or even sergeants were in charge. We only deployed officers to areas where their presence was needed to liaise with their African counterparts. Even in those locations, officers primarily executed coordination; NCOs executed

"This was an incredibly rewarding venture for both the African soldiers and 2nd Battalion, 18th Field Artillery Regiment personnel."

"Influence and ideas are what will ultimately win the battle against extremism in the Horn of Africa."

the majority of the training and leadership tasks.

To get a realistic picture of the degree of autonomy our deployed Soldiers operated under, you must understand the geographic separation that existed between our teams and their battery and battalion headquarters. Our teams executed operations literally thousands of miles from their parent organizations. Personal responsibility and extreme competence were required to succeed. Our Soldiers performed brilliantly in this environment. They coordinated and directed operations with senior officer and NCO leaders from multiple nations, built programs of instruction and taught courses with little guidance or assistance, provided force protection for strategic level projects and performed many other tasks with no actual oversight. When given the opportunity to lead in this environment, our young leaders rose to the occasion. They did all this while maintaining the highest standard of personal conduct and endearing themselves to the Africans they worked and lived with. The success of our battalion and Combined Joint Task Force-Horn of Africa during our deployment is directly attributable to our NCO and small unit leaders.

African pride. Our entire unit was very impressed by the competence of the African militaries we worked with. Africans are highly intelligent and, in many cases, well-schooled. Countries such as Kenya, Uganda and Rwanda are steeped in Western military doctrine based on their colonial past. These countries educate many of their officers in the United States, Great Britain and France – among other places. Most of the officers and veteran soldiers we encountered have multiple operational deployments, executing stability operations in Darfur, southern Sudan, the Democratic Republic of Congo and Somalia. Thus, when we discussed and trained for stability operations in Africa, it was important that we understood that our African counterparts actually knew more than we did. The major difference between them and us is resources. Training and operational budgets are very limited, and their equipment is old or non-existent. However, this does not stop them from beating the bush for hours each day, marching miles without water, while they hunt down rebel factions who threaten the local population. The truth is that most of the African nations we worked with are good at what they do and take immense pride in the quality of their work. Embracing this

fact was critical in allowing our Soldiers to effectively mentor and work with them.

Culture. In order for our Soldiers to succeed, it was imperative that they become fully immersed in both the military and social cultures of the countries where they operated. It was vital that they establish credibility as professionals who truly cared about the people they mentored and the civilian population they interacted with. Our Soldiers lived in a variety of conditions. They ranged from a two-story house in the middle of Jinja, Uganda, where a housekeeper cooked for the team, to a building at the Ethiopian NCO Academy, that was condemned by U.S. standards, where our Soldiers survived for months on meals ready to eat, Ethiopian food and Spam sandwiches.

Regardless of the living conditions, one of the keys to our success was embracing the culture. Our Soldiers in Uganda interacted daily with the local population, attended church, festivals and other local activities. Our Soldiers in Dire Dawa, Ethiopia, played weekend basketball games with locals and dined in local eating establishments. Our troops in Tolay, Ethiopia, played daily volleyball games with the students and cadre at the NCO academy. Our Soldiers did many other things to immerse themselves in the local culture, which was yet another key to our success.

Go the extra mile. People from all over the world can tell whether you truly care about them or not. Early on in our deployment, one of our battery commanders organized a group of Soldiers who began spending time with local orphans in Djibouti. Weekly, our Soldiers gave their time, energy and, ultimately, their resources to help these people who have absolutely nothing. To say that the people of Djibouti and the other countries where we worked live in poverty is an understatement. Most people live in homemade huts without electricity, running water or any of the other luxuries that we take for granted. To see this and live among it is truly eye-opening. However, our Soldiers did something about it. They inconvenienced themselves enough to show the population they cared. The efforts in Djibouti grew throughout our time in theater to the degree that service members from throughout Camp Lemonnier began participating and American individuals and organizations began sending items for these needy people.

In Jinja, Uganda, our NCO-in-charge organized his crew and spent over 1,000

man hours working with a local orphanage school. They built and planted an orchard that will someday feed over 80,000 people in this area of the world where food is a scarce resource and people go hungry. What's more, they gave of themselves to truly get to know the people and children who lived and worked there. This group and others worked with local schools, churches and other organizations to invest in the lives of the communities where they worked. They did not do this at the direction of their chain of command or to earn public accolades; they did it because they are good people who care.

The truth is that our Soldiers are the only Americans most of these Africans have ever met or will ever meet. I am confident that we had a very positive influence on the Africans we instructed and worked alongside – both professionally and personally. We performed our assigned tasks in a professional, competent manner and had operational impact for Combined Joint Task Force-Horn of Africa and U.S. Africa Command. However, I believe the impact our Soldiers had on the local populations – most of whom had never met any Americans – through their acts of compassion and generosity had an even greater impact in this area of the world for our country.

Influence and ideas are what will ultimately win the battle against extremism in the Horn of Africa. To this end, 2nd Battalion, 18th Field Artillery Regiment contributed mightily. God knows, it was quite the experience. Our African adventure has changed our perspective and is an experience most of us will value forever.

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Staying Prevention

By MAJ G. Damon Wells

The ability to move while wearing a full combat load and handle bulky and heavy equipment is vital to the combat mission of most Soldiers, especially the field artilleryman's. The cannoner's duties are multifaceted, including a variety of multiplane movements that involve the rotation and extension/flexion of every joint in the body with and without

added external resistance. To be optimally effective, Soldiers must be trained and primed in proper body mechanics and injury prevention. The potential for injury is always present and must be contemplated by first-line supervisors and leaders before every mission and during day-to-day activities. Due to the impact of productivity lost to injuries, specific awareness of injury prevention should be practiced in every field artillery unit, and it should be part of weekly physical training. It is important to understand why these injuries occur and more importantly how can they be prevented.

A chronic or recurring injury is a Soldier's worst nightmare. These injuries can affect both mission accomplishment and career productivity. The prevalence of work-related lower back injuries is on the rise. With the Army's current operational tempo and little foreseeable relief, it makes sense to implement a lower back injury prevention plan to keep artillerymen healthy and in the fight longer. About 60 to 80 percent of Americans experience lower back problems and the related consequences during their lifetimes. For individuals who are physically active and engage in repeated lifting of heavy items, the risks are increased. It was estimated from a 2007 study that back pain affects more than 150,000 Soldiers yearly, accounting for compromised missions, lost productivity and higher healthcare costs.

The primary enemies related to lower back injuries include improperly executed heavy physical work; inappropriate static posture; repetitive work without proper rest; slipping, tripping or falling; twisting while the spine is loaded; vibration while driving heavy vehicle; fatigue/poor muscle endurance; "attitude" at work leading to poor decisions; and mental fatigue impeding lifting techniques. An evaluation of these tasks reveals that 90 percent of them fall within the duty description of a Soldier. Luckily, by mitigating these risks, lower back injury is one of the most preventable ailments in the Army.

Mechanics. The architecture of the human body is both complex and resilient. The spine, for example, is capable of supporting thousands of pounds and, when treated properly, can last a lifetime injury

ing in the Game: on of low back injuries

free. Unfortunately, many Soldiers are never taught the proper mechanics for lifting and frequently sustain lower back injuries. In addition, most Army units use running as the primary tool for cardio respiratory fitness development, which adds to physical stress the spine receives throughout an entire military career. Because the spine is comprised of a series of vertebrae separated by connective tissue (cartilage), it is inherently susceptible to injury due to improper use. When the connective tissue is pinched between two vertebrae (uneven disk compression), injury is likely. Proper lifting mechanics ensures that the disks are aligned properly over the cartilage and that the compression forces are equally distributed. Implementing a lower back injury prevention program should be based on appropriate knowledge and application of biomechanics and training techniques and also must include a variety of activities for cardio respiratory fitness that provides relief to physical stress on the spine and vertebrae.

The proper application of biomechanics and proper body alignment is a crucial component of lower back injury prevention. The spine can be engaged in a number of ways, but there are a few ways to place the body into proper lifting positions that minimize the risk of injury. Notably, a rounded back should be avoided at all costs. It is worth the time to take a block of physical training time to train how to employ an “active back.”

An active back ensures the spinal erectors (low back) and hamstring muscles are engaged properly and can work without risk of damage to connective tissue or muscle. To train an active back, one’s spine must be straight or slightly arched with shoulders (shoulder

blades) retracted and flexed. From the side there should be a straight line from the base of the spine just above the buttocks to the base of the skull. The knees should be bent to whatever degree is necessary, and the head should remain in a neutral position. Avoid the common misperception to look up as this puts the cervical spine in an unnatural position. To lift with the active back, extend your shoulders up while maintaining the straight back position.

Weak hamstrings and lower back muscles can cause a rounding of the back, which is extremely harmful and to be avoided. Also, many Soldiers have overly tight back and hamstrings that can cause a rounding of the lower back. This can be corrected with proper training and flexibility drills (stretching). Furthermore, adding a dedicated block of instruction on the active back indicates to the Soldiers in your formation that it is important to maintain proper posture under exertion. It would also give them the knowledge to make corrections when they see improper lifting techniques employed by other members of the unit.

Prevention plan. Field artillery leaders must incorporate three simple concepts into their physical training regimens — strength, mobility and flexibility. The first pillar of the lower back injury prevention plan is strength. A strong structure provides the

basis for injury prevention by developing and maintaining tough muscle, bones and connective tissues (tendons and ligaments). The primary focus for lower back injury prevention strength training should be the core muscles, including the abdominals and the oblique complex on each side of the body. These muscles work to provide balance and stability to the spine and ensure better posture throughout the day whether the Soldier is sitting, standing or lifting.

Strength. Strength is developed through the thoughtful application of resistance training on a weekly basis. Three key principles for developing optimal strength are progression, overload and balance. Progression is the week to week improvements that are made during the program. Increased resistance, shorter rest periods and added sets are examples of good progression techniques. The key to progression is adding small improvements each week. Those small increases in intensity are known as overload. By keeping track of workouts, small unit leaders can ensure that each Soldier is making weekly progress by using the overload principle, thus becoming stronger. Be cautious about using the typical “more is better” technique. Small increments over time yield the best and longest lasting results, and they are less likely to lead to injury, as well.

Another vital component of strength is balance. Unlike the traditional definition (maintaining one’s equilibrium), balance as a component of strength references equal distribution of work across the entire body. This is also a key component of injury prevention, and leaders must monitor workouts to ensure that all muscles are worked equally. Units that focus

heavily on pushups (not pull-ups), sit-ups (not lower back) or upper body (not lower body) are at a higher risk for injury. Training out of balance is common throughout the Army and is one of the easiest fixes for injury prevention.

Mobility. Mobility is the second pillar of the lower back injury prevention plan. Mobility is the ability to translate force into productive movement. This is especially applicable in combat situations, where efficient movement is critical and chances of injury are high. Broadly defined, mobility includes tasks such as jumping, landing and changing directions quickly (agility). Because force is being applied to many parts of the body at changing degrees and directions, the chance of sustaining an injury during mobility operations is high. Implementing appropriate mobility drills into a physical training program is essential. In addition, mobility drills can be a great substitute to the development of high intensity cardio respiratory fitness and can ease the impact of a traditional four to five times a week running program. Mobility drills not only give you an opportunity to train the transferability of weight, but also allows for the inclusion of some variety into your physical development programs.

Flexibility. Flexibility, while frequently under employed, is



To be optimally effective, Soldiers must be trained and primed in proper body mechanics and injury prevention. The potential for injury is always present and must be contemplated by first-line supervisors and leaders before every mission and during day-to-day activities.

(Photo by Timothy L. Hale)

vital to lower back injury prevention because overly tight muscles are a frequent cause of strains in the low back and hamstrings. For example, a tight hamstring muscle changes the anatomical position of the pelvis and changes the amount of stress that the lower back's vertebrae receive during movement. While Soldiers do not need to be as flexible as yoga and martial arts participants to be mission capable, they do need a requisite amount of flexibility to mitigate lower back injuries as much as possible. Tight muscles in the core (including lower back) and hamstring area are one of the most common causes of lower back injury.

During movement, whether it is mobility oriented or lifting objects, inflexible muscles prevent a full range of motion and force supporting muscles to compensate and put undo stress on joints and connective tissue. This stress can lead to an acute injury, like a muscle tear or strain, or a chronic injury that leads to lower back pain over time. Flexibility training should not be confused with warm-up drills. Before physical training, units should focus on warming the muscles in preparation for movement. Flexibility training is most effective after physical training is finished, when muscle are loose and pliable. Employing weekly flexibility training at the end of morning physical training is a valuable tool in a lower back injury prevention plan.

Flexibility programs also can be conducted in isolation at the individual level in any environment. After a several drills in the field, muscles can become tight and may need some flexibility exercises to return them to their normal length and so they can continue to function properly. Every time there is a significant amount of muscular activity, Soldiers must consider a quick stretch of the larger muscles of the body.

Implementing a training program oriented on a well executed lower back injury prevention plan is a simple task and is a necessity at the battery level. First, ensure that batteries are planning detailed physical training programs at least eight weeks in advance. This is enough time to verify that all units are employing a logical progression in their routines. The initial stages of the routine should include plenty of core-strengthening work, such as abdominal, hip flexor and lower back focused exercises.

These workouts also should be closely monitored by junior leaders to ensure that every Soldier uses proper biomechanics and an active back. Daily operations should be monitored for the same reasons. Keep the workouts similar enough to see some overload at each workout. If every workout is completely different, it is difficult to determine if one workout was more intense than the last, as this becomes a subjective matter.

Incorporating balance into the weekly regimen is also important. Place an equal value on every muscle group to prevent muscular imbalances that inevitably lead to injuries. Lastly, make every member of unit an advocate of your lower back injury prevention plan program. If they are all looking after each other, proper techniques will be applied, lower back injuries will be minimized and productivity and quality of life will be improved.

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Photo by SSG Sean A. Foley (U.S. Army)

Information Engagement: Operations in a permissive environment

By MAJ Lyndon D. Jones

With the publication of *Field Manual 3-0 Operations* in February 2008, the Army changed the conceptual framework for information operations. Instead of information operations performing an integrating function for the staff, the new Army information tasks institutionalize information operations functions into separate staff divisions. This change addresses the cognitive domain of the information environment below the operational level in a way that *Joint Publication 3-13 Information Operations* does not. *Field Manual 3-0* accomplishes this by grouping the message (strategic communication and defense support to public diplomacy) and the means (leader, Soldier, public affairs, psychological operations and combat camera) into one of five Army information tasks — Information Engagement.

U.S. Army South is the Army Service Component Command for U.S. Southern Command and, therefore, conducts much of its operational planning with respect to joint doctrine. However, many of the exercises within the focus area are executed below the divisional level by forces from the reserve

component. Beyond the Horizon is one such example of an Army South mission led by a brigade-level commander in a permissive environment.

Information engagement best practices.

With the update of *Field Manual 3-0*, how does the Army translate joint doctrine, including *Joint Publication 3-13* and associated policy statements, into useful information engagement applications in a theater of operation? I will use Beyond the Horizon to demonstrate how employing information engagement in permissive environments can support the delivery of strategic messaging best and discuss some best practices to ensure operational success.

Appoint an information engagement officer. Beyond the Horizon is conducted in Southern Command's permissive area of responsibility and carried out largely by Soldiers from the reserve component. Beyond the Horizon integrates engineering, medical, small-unit familiarization program engagements, reciprocal platoon exchanges, subject matter expertise exchanges and state partnership activities under one umbrella. Beyond the Horizon makes best use of resources while simultaneously building partner-nation capabilities and benefiting the affected local populations.

During these missions, the information engagement officer is the tactical commander's strategic linchpin between the operational planning and tactical implementation that translates *Joint Publication 3-13* into effective information. The information engagement officer provides the strategic key player to facilitate continuity, effective coordination and synchronization of capabilities, resulting in a more productive and robust information environment plan that enables training opportunities for reservists and supports the commander's strategic communication objectives.

According to my experience, it is imperative that an information engagement officer be appointed to serve on staff. The challenge of Beyond the Horizon begins with manning. Reserve component brigades, battalions and companies often deploy without an information engagement officer. U.S. Army South's assigning an information engagement officer provided an effective bridge to cover potential continuity gaps. This action officer is responsible for planning that begins in the early stages and continues through execution, ideally with the information environment action officer serving as the information engagement officer. This practice was very effective

“Just as every Soldier is a rifleman, every Soldier is a strategic messenger and should be trained accordingly.”

in establishing expectations for each capability based on command guidance and coordination with respective directorates, translating *Joint Publication 3-13* into effective information environment as outlined in FM 3-0.

The information engagement pre-deployment tour. During the planning phase, an information operation is always a stated priority, but frequently becomes overshadowed by logistical and operational issues. In an attempt to support information operation objectives without compromising the focus, U.S. Army South's G7 (Fires and Effects Directorate) and G3 (Operations Directorate), and the Beyond the Horizon exercise commander and his S3 (Operations Officer for the exercise) or conducted a one-week information environment pre-deployment tour in coordination with military assistance and advisory group and the U.S. Embassy in Santo Domingo in support of Beyond the Horizon 2009 – Dominican Republic.

This tour consisted of two components, the key leader engagements and media engagements. The tour succeeded in terms of pre-deployment messaging, reaching key-partner nation's political and civic leaders, as well as important media sources. **JUST AS ONE SENDS SCOUTS OUT ON A ROUTE RECONNAISSANCE, ONE MUST GET AN INFORMATION ENVIRONMENT OFFICER OUT EARLY TO MEET RESPECTIVE KEY LEADERS.** The information environment pre-deployment tour is recommended as standard practice and serves as an effective intelligence preparation of the information environment.

A joint operation named New Horizon 2006 – Dominican Republic was the catalyst for the information environment pre-deployment tour. There was little or no pre-deployment messaging to inform the public of the scope and details of the exercise; as a result, Dominicans were left to draw their own conclusions.

Consider the context, it is 2006 and the U.S. is engaged in the War on Terrorism. Bystanders observed bulldozers on the backs of flatbed trucks driven by U.S.

Soldiers moving through their towns. A generation of Dominicans vividly recalled the U.S. intervention and occupation in 1965 during the height of the Vietnam conflict. The media, unaware and always game for a sensational story ran with a negative story line. The result? Soldiers who deployed expecting to train and put their skills to good use were left frustrated. As a result, the U.S. taxpayer got less than what a sound information strategy could have achieved.

For 2009's exercise, U.S. Army South, Puerto Rico's National Guard, Dominican Republic's state partner and the Beyond the Horizon headquarters element led with a tour a month before the operation. The populace got the opportunity to understand the purpose and intentions of the U.S. presence as an invited guest and valued partner nation through the use of traditional media and key leader communications.

Leader and Soldier engagement and the information environment reception briefing. At U.S. Army South, G7 developed an information environment brief that is provided as part of the reception brief for all incoming Beyond the Horizon Soldiers. The brief underscored the critical role of the leader and Soldier as strategic messengers in the context of national security. In the case of Beyond the Horizon, leaders and Soldiers have a unique training opportunity that enables relationships between Soldiers and partner-nation members that can serve to propagate the strategic message directly. **THEREFORE, SOLDIER LANGUAGE AND ACTIONS SHOULD BE CONSISTENT WITH THEMES AND MESSAGES.**

Just as every Soldier is a rifleman, every Soldier is a strategic messenger and should be trained accordingly. Ultimately, a reception brief addressing leader and Soldier engagements is only as effective as the leadership that reinforces Soldier expectations throughout each Soldier's tour of duty as a strategic messenger.

The Soldier has a unique and significant role in his ability to reinforce and amplify positive actions and increase goodwill and support for the friendly mission. To reinforce Soldier expectations, the G7 designed a

simple, yet effective, assessment tool to capture the public relations posture on the ground and to serve as an early warning and mitigation mechanism should concerns arise. In effect, it serves as an inside-out view of how we see ourselves in relation to the local populace.

Public service announcements. This year U.S. Army South's G7, with support from the Office of Strategic Communication, developed a template for a public service announcement script as a way to leverage mass communications despite budget constraints. Because public service announcements are based on donated media time and the benefits of Beyond the Horizon's medical readiness training exercises and related services represented need-to-know public information, the public service announcement served as a cost-effective means to increase awareness within the construct of the partner-nation's local media while also serving as a catalyst for all other Beyond the Horizon activities.

The public service announcement initially was employed in the Dominican Republic and proved to be very effective. While on the surface it gives the appearance of a simple promotional announcement, there are several subtle key messages. This public service announcement included the partner-nation's lead and ownership of Beyond the Horizon, the state partnership program between Dominican Republic and Puerto Rico, and the exercise's duration. The initial assessments were that the public service announcement script was received well and was overwhelmingly preferred to the audio product. Reports indicate that recipients of the public service announcement heard it more than three times daily. Additionally, the initial recipients forwarded the read-script to their affiliates and professional peers, expanding the overall coverage.

Our recommendation is to develop the public service announcement as a three-part package consisting of a read-script, audio format and video format, accommodating radio and television formats. As a rule, the public service announcement should not exceed 45 seconds. The commander may select the highest quality of each for recommended distribution in coordination with the respective security cooperation offices and the U.S. Embassies.

The public service announcement, due to its negligible production requirements, should be the minimum standard. Local populations are only one of several important audiences. The media itself is another audience; the better informed the

media is, the less likely it will be to entertain and promote negative propaganda stemming from uninformed speculation.

Moving from stovepipes to partnerships. Conceptually, information engagement is sound and considerably easier to grasp as an Army information task than joint and former Army information operations doctrine. Doctrinally, the coordinating and integrating civil-military operations remains an issue of debate. Tactically, there is significant work to overcome the friction that exists between unit sections and their respective organizational cultures. Keeping the functions segregated into their respective “stovepipes” is inefficient and results in the underuse of capabilities and resources. Successful information engagement comes from an understanding of purpose and successful partnerships.

Educating tactical commanders. The information proponent office at Fort Leavenworth is working hard to train enough Functional Area 30 Information Operations officers to meet Army tactical-level needs. The Information Officer Qualification course is the only course in the Army inventory that requires officers to pass an oral comprehension board as a condition of graduation. This is an important

feature that enables graduates to educate the Army at-large with respect to information engagement and emerging doctrine.

In practice, some exercises are too short in duration to allow for tactical commanders to begin learning on day one. With information engagement, timing and momentum are the keys to success. For example, New Horizon 2006 – Dominican Republic, the task force found themselves adrift responding to misinformation because the messaging was reactive versus proactive.

Trained Functional Area 30 officers, when available, understand information operations and have the ability to articulate them to tactical commanders. They need to have the time and resources to educate commanders and shape the information environment.

Understanding strategic communication. Effective strategic communication is a top priority for U.S. military leaders. But that does not mean that every military leader conceptually understands strategic communication. Some of our peers are brave enough to ask the question, “What is strategic communication?” So what is strategic communication and who is responsible for it at the tactical level?

STRATEGIC COMMUNICATION IS MESSAGING. JUST AS EVERYONE IS A SAFETY OFFICER REGARDLESS OF RANK, THE SAME APPLIES TO STRATEGIC COMMUNICATION — EVERYONE IS A STRATEGIC MESSENGER. As with safety, in which the commander designates an officer to be responsible for the overall coordination of safety measures, the S7, or the information officer at the brigade or battalion level, serves the tactical commander as the chief communication officer. In the Army, this officer is normally Functional Area 30 Information Operations trained individual responsible for incorporating strategic communication into all operations, actions, activities, and products to maximize available capabilities, means and methods.

In joint commands, however, the strategic communication may fall in a separate directorate. For that reason, there is a need to doctrinally differentiate from *Joint Publication 3-13* to *Field Manual 3-0* as it applies to the tactical commander so as not to confuse it with information engagement. Information engagement is the broad umbrella that incorporates both the message and the means. Although civil affairs is not included in information engagement’s broad umbrella as a doctrinal



1LT Francis Lamb, a personnel officer with 301st Reserve Support Group, sits down to talk with school children in La Granja, Honduras, where U.S. and Honduran Soldiers renovated their school, May 2, 2008. The renovation project was part of Beyond the Horizon. (Photo by SSG Sean A. Foley, U.S. Army)

capability, it is a means and key enabler in support of strategic messaging at the grassroots through key leader engagement and civic action projects.

J-staff versus s-staff. Planning at the tactical level, according to *Field Manual 3-0* and *Field Manual 5-0 Army Planning and Orders Production*, is intentionally and inherently different for U.S. Army and joint forces. This excerpt from *Field Manual 3-0*, Appendix D is instructive. "Army forces do not use the joint systems analysis of the operational environment, effects-based approach to planning, or effects assessment. These planning and assessment methods are intended for use at the strategic and operational levels by properly resourced joint staffs."

It is important to understand that while a sprinkling of multiservice may constitute joint forces, it doesn't necessarily constitute a joint staff or j-staff. This is important because a j-staff implies joint doctrine. Joint information operations doctrine is not designed to address the cognitive domain below the operational level. Operational planning for the j-staff is inherently more applicable to the strategic and operational levels.

The s-staff represents the tactical implementation through the Army military decision-making process that takes place at division and below. The S7's roles and responsibilities should remain aligned with tactical Army doctrine, including the decision-making process and the conduct of the tactical information engagement mission and strategic communications to address the cognitive domain of the information environment better.

This article provides a snapshot of the current state of information engagement for the permissive environment within a service component command. **THE INFORMATION ENGAGEMENT PRACTITIONER SHOULD EMPLOY THESE RECOMMENDED BEST PRACTICES WITHOUT DELAY.** The information engagement pre-deployment tour, in support of pre-deployment messaging requirements, is the primary method for deploying the best practices described in advance of an operation, activity or action in a permissive environment.

With representation from each participating capability, including civil affairs and command and staff, this is effective in promoting the partnership and

educating the tactical commander regarding information engagement and strategic messaging. Planners must make every effort to support this activity and ensure the selection and availability of key leadership for this requirement.

One additional recommendation, from a professional development standpoint, is to implement a system or functional area cross training and assignment to promote the migration from "stovepipe" to partnership and promote education within staff and command structures. Using the Army example, a public affairs officer cross-trained and assigned in information operations or vice versa would enable the collaborative partnerships necessary.

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Engaging the media



By Jennifer Blais
Managing Editor

Barbara Starr, Pentagon correspondent for CNN, interviews GEN David Petraeus, commander United States Central Command, at Kabul International Airport, Dec. 15, 2009. (Photo by PO2 Christopher Hall, U.S. Navy)

As Thomas Jefferson once said, “All that tyranny needs to gain a foothold is for people of good conscience to remain silent.” Never have these words been truer than in today’s world. With embedded media and news organizations on every corner, you have to live under a rock or way off the grid to avoid the media. The media, whether it is print, radio or television, is going to be out in the mix of events including training exercises, combat deployments, ceremonies and even funerals. The question we have to ask at this point is, why avoid them? Why not go out and tell the field artillery story, the air defense artillery story or the Army’s story? We, as servicemembers, families and civilians, must be aware and more importantly prepared for the media to tell a positive story. The first thing to remember is they are not the enemy.

THE MEDIA CAN BE A VERY SUCCESSFUL TOOL TO EDUCATE, PROMOTE AND CELEBRATE THE ACHIEVEMENTS OF OUR ARMED FORCES. As a former servicemember, I observed many Soldiers unsure of the media and even their own public affairs representatives. The chain of command at every level should be proactive in engaging a media strategy and bolstering the confidence of their Soldiers to build a strong and stable relationship with their public affairs officer and the civilian

press, both U.S. and local nationals. You, as a servicemember, are the subject matter expert for your field. If you do not tell the story, someone else will do it for you.

This asset is changing in a way that is shaping the world today. During World War I and World War II, it would take weeks if not months for a letter to get home to the families. Now, in today’s information age, I could text a friend who is in Kuwait, Iraq or Afghanistan and they could have a message back to me on Facebook 30 seconds later. This tool has increasingly become more powerful and influential, but as a wise comic book writer once wrote, “With great power comes great responsibility.”

The power to tell the Army’s story has never been easier and with a little responsibility we can shine a positive light on the good work each of the branches is doing. Remembering what you say or what you do not say can save your buddy’s life. With the number of media outlets and the accessibility we have to those outlets both at home and abroad, it is every Soldier’s and family member’s job to enforce information security. **USING COMMON SENSE AND DISCRETION ARE THE CORE POINTS TO ALL PUBLIC AFFAIRS AND SOCIAL MEDIA REGULATIONS AND MEDIA ON THE BATTLEFIELD TRAINING.** Things that

may be happening in your area of operations can have international implications. Documenting exact troop numbers and strengths, and tactics, techniques and procedures are all good examples of sensitive information that needs to be protected. Of course, a Soldier should never lie about anything, but any question outside of their 'comfort zone' or their realm of responsibility should be fielded through a public affairs representative or their chain of command. Everyone is responsible for operational security.

Another piece to the media-Soldier puzzle is training. **GETTING THE RIGHT TRAINING AND PREPARING FOR THE MEDIA IS JUST AS IMPORTANT AS DOING PREVENTATIVE MAINTENANCE ON YOUR WEAPON.** They are tools to fight in the international conflicts we support and as such should be handled carefully but with confidence. "Unfortunately, unrealistic portrayals of media on the battlefield reinforce bad habits and perceptions of journalists on the battlefield. When the platoon finally deploys, it encounters embedded local and international media on the battlefield. And the world reads, watches and listens as opportunities to tell the Soldiers' stories are lost," said LTC Randy A. Martin, public affairs officer observer/controller, Joint Readiness Training Center operations group. "With a little preparation, creativity, planning and resources, training centers can create an information environment that promotes effective media on the battlefield training."

And of course when in doubt, research and educate yourself on the policies, procedures and regulations. There are no firm policies which directly refer to the use of the major social networking sites

such as Facebook, Flickr, YouTube, etc; however Army Regulation 360-1 can assist with many media-related questions. As regulation currently stands, it is important for Soldiers as well as public affairs professionals to remember the two guiding documents that apply to all public communication: operations security and the Uniform Code of Military Justice. As those regulations are written, Soldiers must maintain professional conduct and good order and discipline in the virtual world in the same ways they would in the real world. Special care should be taken to ensure that public facing profiles, to include Facebook pages and sites, present an appropriate picture of Army life. Army Regulation 530-1, Operations Security policy, states that Soldiers who blog and identify their affiliation with the Army must let their commander know they're blogging.

Overall the things to remember, the lessons to take forward are 'You, as a Soldier or family member, are not an official spokesperson for the U.S. Army, the President or the State Department.' **CARE MUST BE TAKEN TO PRESENT A PROFESSIONAL, KNOWLEDGEABLE AND ACCURATE PORTRAYAL OF ANY GIVEN SITUATION WITHOUT JEOPARDIZING MISSION READINESS, EFFECTIVENESS OR SECURITY.** Knowing when to ask for help, whether from a public affairs representative or the chain of command can aid each Soldier from 'flying blind.' The expectation of knowing an M-16A2 rifle with no training, guidance or practice would not be recommended on the battlefield and neither is being unprepared for the media that awaits all of us around every corner.

Fires

MEDIA ENGAGEMENT SMART CARD

Things to know and do

- 1) Remember the media is a powerful communication device, which you can use to tell the Army's story and support the overall information strategy. All Soldiers and leaders are potential ambassadors/spokespersons for your country and unit.
- 2) Soldiers do have a right not to talk to the media; however, those who refuse to speak may send a powerful message that something is being hidden or the operation is going badly.
- 3) Media are influential members of the public. They are not the enemy. They are after a story; so, tell your story.
- 4) Do not refuse to talk to unescorted media. During early stages of an operation, media are likely to be uncredentialed and unescorted. In this case, be courteous and as long as it does not interfere with the mission, talk with them.

Prepare for the media

- 1) Never go into a situation blind. Ask a public affairs representative for help and guidance (if you need it). Anticipate issues and questions and develop responses that include relevant command messages. In addition to your unit's role and the Army, consider current issues in the national and international communities. You can affect them all.

Interviews don'ts

- 1) Do not schedule or participate in an interview or an event if it will interfere with your mission. However, do not use the unit's mission or being "too busy" as a "smokescreen" to avoid the media or an interview.
- 2) Do not attempt to cover negative events with a cloak of secrecy. Do, however, talk about matters over which you have direct responsibility.
- 3) Everything is "on the record." Never answer "off the record" questions. Watch out for the "turned off recorder" being on.
- 4) Never lie. Always be careful of personal opinions, which may be viewed as representing your unit or the Army.
- 5) Do not discuss exact numbers, troop strengths or specific vehicle modifications. Use terms like approximate, light, heavy or moderate.
- 6) Do not discuss political or foreign policy matters. Don't be caught speaking for the president or State Department. Stay in your lane and talk about things within your specific areas.
- 7) Do not provide the enemy with propaganda material by grumbling and thoughtlessly complaining.
- 8) Don't get trapped. If a reporter tells you he got information from another unit, refer him to those sources for more details. Use common sense.

Helpful hints

- 1) If you can't talk about something, tell the media why.
- 2) Be careful of statements of absolute nature.
- 3) Know what you can say and how to show the media as well as the things you cannot discuss or show.

Final thoughts

- 1) What you say or don't say can save your buddy's life.
- 2) What may happen in your area of operations can have international implications.
- 3) Remember what you say to the reporter is not as important as what the reporter says to the world.

"Public Affairs fulfills the Army's obligation to keep the American people and the Army informed, and helps to establish the conditions that lead to confidence in America's Army and its readiness to conduct operations in peacetime, conflict and war."

Army Public Affairs Mission

Fires

AUTHOR GUIDE

Article subjects. *Fires* strives to be “forward-looking.” We’re at the dawn of a new Army transformation. Many exciting things are taking place in the field and air defense artillery fields of expertise. Article subjects should therefore be current and relevant. Writers may share good ideas and lessons learned with their fellow Soldiers, as exploring better ways of doing things remains a high emphasis with *Fires*.

If an article subject is significant and pertains to field artillery or air defense artillery and its diverse activities, as a rule of thumb we’ll consider it appropriate for publication. Article subjects include (but aren’t limited to) technical developments, tactics, techniques and procedures; how-to pieces, practical exercises, training methods and historical perspectives (Army Regulation 25-30, Paragraph 2-3, b).

We are actively seeking lessons-learned articles which will enhance understanding of current field and air defense artillery operations. The magazine’s heart is material dealing with doctrinal, technical or operational concepts. We especially solicit progressive, forward-thinking and challenging subject matter for publication. In addition to conceptual and doctrinal materials, we encourage manuscripts dealing with maintenance, training or operational techniques.

Good ideas or lessons-learned articles should have two closely related themes: one, what did you learn from what you did? The second theme is: what is most important for others to know, or what will you do differently in the future? Include only the pertinent information on how you did it so someone else can repeat what you did. Don’t include a blow-by-blow of your whole deployment. The article’s emphasis should be that your unit has a good idea or some lessons-learned to share.

Steps involved in submitting an article to *Fires* are outlined following.

All articles should have the bottom line up front; however, to better ensure your chances of publication, we recommend that you read all the criteria contained in this article as well as apply the guidance contained in the *Fires* style manual at sill-www.army.mil/firesbulletin/style.asp for more details. We do not pay for articles or illustrations other than providing

contributors with complimentary copies of the magazine.

Fires is not copyrighted. All material published is considered in the public domain unless otherwise indicated. (Occasionally we use copyrighted material by permission; this material is clearly marked with the appropriate legal notification.)

If you get permission to use someone else’s graphic or photo, especially from the private sector, we need proof of that in writing.

Getting started. Select a relevant topic of interest to the U.S. Army field and air defense artillery community. The topic must professionally develop members of these fields. Write an outline to organize your work. Put the bottom line up front and write clear, concise introduction and conclusion paragraphs. Follow the writing standard established in Army Regulation 25-50, Preparing and Managing Correspondence, Section IV (the Army writing style), and Department of the Army Pamphlet 600-67, Effective Writing for Army Leaders, especially Paragraphs 3-1 and 3-2.

The Army standard is writing you can understand in a single rapid reading and is generally free of errors in grammar, mechanics and usage. Also see *Fires*’ style manual. Maintain the active voice as much as possible. Write “Congress cut the budget” rather than “the budget was cut by Congress.” (Department of the Army Pamphlet 600-67, Paragraph 3-2, b[1]). Write as if you were telling someone face-to-face about your subject: use conversational tone; ‘I,’ ‘you’ and ‘we’ personal pronouns; short sentences and short paragraphs. Articles should be double-spaced, typed, unpublished manuscript, between 3,000 and 3,500 (or less), but no more than 5,000 words, including inline citations as appropriate.

Authors should check their articles’ contents with unit commanders or organization directors or S2s/G2s to ensure the articles have no classified or operations security information in them. Clearance requirements are outlined in Army Regulation 360-1, Chapter 5, Paragraph 5-3. Headquarters Department of the Army/Office of the Secretary of Defense clearance is required if your article meets any of the criteria listed there. Article clearance is further covered in Paragraph 6-6, with

procedures on how to do so outlined in Paragraph 6-9. The bottom line on most article clearance is discussed in Paragraph 6-6. While you certainly may ask your local Public Affairs Office’s advice, it is the “author’s responsibility to ensure security is not compromised. Information that appears in open sources does not constitute declassification. The combination of several open-source documents may result in a classified document.”

So while the *Fires* staff may question the sensitivity of an article we receive, it is not our responsibility to officially clear articles, however if we do see something within an article that might cause concern, we reserve the right to withhold publication of such an article until it is thoroughly vetted with the proper subject matter expert or Army authority. But it still remains the author’s responsibility, as outlined in Army Regulation 360-1, not to compromise national security or U.S. Army operational security matters.

We reserve the right to edit an article, so the *Fires* staff will edit all manuscripts and put them in the magazine’s style and format. The author of an article or interviewee will receive a courtesy copy of the edited version for review before publication, however, if the author does not get back to the *Fires* staff with any questions or concerns within a specified suspense date (typically five to seven working days) it will be assumed the author concurs with all edits and the article will run as is.

Except in the case of Armywide news items, authors should not submit a manuscript to *Fires* while it is being considered elsewhere. A comprehensive biography, highlighting experience, education and training relevant to the article’s subject and credentialing the author as the writer of the article. Include e-mail and mailing addresses and telephone, cell and fax numbers. Please keep this information current with *Fires* for as long as we’re considering the manuscript.

Photographs and graphics. See the “*Fires* Bulletin Photographer’s Guide” on page 42 of this edition for information on submitting photographs.

Send the article. E-mail the editor at firesbulletin@conus.army.mil; or mail them to P.O. Box 33311, Fort Sill, Oklahoma 73503-0311.



Mind Fitness: Improving operational effectiveness and building warrior resilience

By Elizabeth A. Stanley and
Amishi P. Jha

Today's complex, fluid, and unpredictable operational environment both demands more from the military in terms of mission requirements and exposes troops to more stressors and potential trauma than ever before. On the one hand, situational awareness, mental agility and adaptability are characteristics that the military wants to cultivate to succeed in such complex environments. In part, this complexity comes from the number and nature of the different missions the military must concurrently fill. The military needs to be able to mix offensive, defensive and stability operations conducted along multiple lines of operations, without the benefit of a clearly demarcated "frontline." Many Soldiers liken this complexity and unpredictability to "the faucet," that is, needing to adjust to situations that could change from cold to hot instantaneously. Moreover, service members must navigate morally ambiguous situations with balance

and non-reactivity, while drawing on stores of cultural awareness to "win hearts and minds." Finally, these missions require that decision making be pushed down to the most junior levels, as the doctrine of "distributed operations" makes clear. Such challenges require a tremendous amount of attentional capacity, self-awareness, and situational awareness.

On the other hand, because of the stressors and challenges of this operating environment, the U.S. military is showing signs of strain. In 2007, the Army experienced its highest desertion rate since 1980, an 80 percent increase since the United States invaded Iraq in 2003. The warning signs of future retention problems are increasingly apparent: suicide, post-traumatic stress disorder, substance abuse, divorce, domestic violence, and murder within the force are on the rise. Recent attention has focused on the growing number of suicides, with the Marine Corps experiencing more suicides in 2008 than since the war began and the Army logging its highest monthly total in January 2009 since it began counting in 1980. Not surprisingly, post-traumatic stress disorder rates are highest among Iraq and

Afghanistan veterans who saw extensive combat (28 percent). However, military health care officials are seeing a spectrum of psychological issues, even among those without much combat experience. Various surveys provide a range of estimates, with up to half of returning National Guard and Reservists, 38 percent of Soldiers and 31 percent of Marines reporting mental health problems. [Consult L. Baldor's "Army desertions surge in past year" (*San Jose Mercury News*); "Mental Health Problems, Use of Mental Health Services, and Attrition from Military Service after Returning from Deployment to Iraq or Afghanistan" by C.W. Hoge et al. in the *Journal of the American Medical Association*; "Longitudinal Assessment of Mental Health Problems among Active and Reserve Component Soldiers Returning from the Iraq War" by Charles S. Milliken et al. in the *Journal of the American Medical Association*; "Alcohol Abuse Rises among Combat Veterans: Study" (Reuters); "Divorce Rate Up in U.S. Army, Marine Corps" (Associated Press); A. Keteyian's "Suicide Epidemic among Veterans," (CBS News); Tony Perry's "Marine suicides in

2008 at a yearly high since Iraq invasion” (*The Los Angeles Times*); Lizette Alvarez’s “Army Data Shows Rise in Number of Suicides” (*The New York Times*); “Across America, Deadly Echoes of Foreign Battles” by D. Sontag and L. Alvarez (*The New York Times*); *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*; and Office of the Surgeon Multi-National Force–Iraq, Office of the Command Surgeon and Office of the Surgeon General United States Army Medical Command, Mental Health Advisory Team.]

It is no wonder. Troops manning checkpoints or on patrol have to make split-second decisions on when to use lethal force, and veterans say fear often clouded their judgment. As Army SGT Dustin Flatt put it, “The second you left the gate of your base, you were always worried. You were constantly watchful for IEDs [improvised explosive devices]. . . . If you’ve been in firefights earlier that day or week, you’re even more stressed and insecure to a point where you are almost trigger-happy.” (See “The Other War” by C. Hedges and L. Al-Arian in the July 30-Aug. 30, 2007 edition of the *The Nation*.) The perpetual uncertainty is mentally exhausting and physically debilitating, and often its effects linger even after returning home.

What can be done to enhance the military’s capacities to operate in such complex environments while simultaneously protecting against the stressors inherent in them? This article proposes a new training program for both improving operational effectiveness and building resilience to the stressors of deployment: mindfulness-based mind fitness training (MMFT, pronounced M-Fit). This program includes techniques and exercises that previous research in civilians has demonstrated to be effective at enhancing the capacities central to mind fitness, such as mental agility, emotion regulation, attention and situational awareness. Importantly, these exercises appear to achieve improvements in mind fitness by changing brain structure and function so that brain processes are more efficient. Our pilot research, conducted in pre-deployment Marine Reservists, suggests that mindfulness-based mind fitness training is similarly successful at bolstering mind fitness and building resilience against stressors in a military cohort. Drawing on the well-documented theory of neuroplasticity, which asserts that

experience changes the brain, this article argues that mind fitness training could complement the military’s existing stress inoculation training by developing skills to promote resilience against stress and trauma so that warriors can execute their missions more effectively.

Stress can degrade performance. A variety of research indicates that harmful conditions such as chronic stress, neglect and abuse can produce harmful changes in the brain. (See *Does Stress Damage the Brain? Understanding Trauma-related Disorders from Mind-Body Perspective* by Douglas Bremner and *The Trauma Spectrum: Hidden Wounds and Human Resiliency* by Robert Scaer) Stress is produced by real or imagined events that are perceived to threaten an individual’s physical and mental well-being. Today, stress is commonly understood to mean external events or circumstances, and as a result, we tend to think of stress as something external to us. However, stress is actually a perceived, internal response. The right

“The perpetual uncertainty is mentally exhausting and physically debilitating, and often its effects linger even after returning home.”

amount of stress will allow a decision maker to function at peak performance. However, excessive stress has biological and psychological consequences that reduce the capacity to process new information and learn. Stress may also bias decision making more toward reactive, unconscious emotional choices.

Recent empirical research about decision making in stressful military environments demonstrates that trauma and stress lead to deficits in cognitive functioning. One large study of Army troops found that Soldiers who served in Iraq were highly likely to show lapses in memory and an ability to focus, a deficit that often persisted more than two months after they arrived home. (See “Neuropsychological outcomes of Army personnel following deployment to the Iraq War” by Jennifer J. Vasterling et al. in the *Journal of the American Medical Association* which was published in 2006.) In the study, 654 Soldiers who deployed to Iraq between April 2003 and May 2005 did significantly worse in tasks that measured

spatial memory, verbal ability and the ability to focus than 307 Soldiers who had not deployed. In contrast, the Soldiers who had deployed outperformed those who had not in terms of quick reaction time (for example, how long it takes to spot a computer icon and react). In effect, the deployed Soldiers’ brains built the capacity for quick reaction, a function more necessary for survival in Iraq, while experiencing degradation in other mental capacities.

In another study, Soldiers who screened positive for mental health problems after returning home were up to three times more likely to report having engaged in unethical behavior while deployed. (Consult the Office of the Surgeon Multi-National Force–Iraq, Office of the Command Surgeon, and Office of the Surgeon General United States Army Medical Command for additional information.) Such behavior, including unnecessarily damaging private property or insulting or physically harming noncombatants, is obviously counterproductive to winning the confidence of the local population. This finding suggests a strong link between the negative effects of stress, which degrades Soldiers’ capacity to manage their own emotions and thereby control impulsive, reactive behavior and a decrease in their ability to perform their mission effectively.

Other studies of military environments have found substantial degradation in cognitive performance when subjects experience sleep deprivation and other environmental stressors. One recent study of sleep deprivation among Navy SEALs and Army Rangers during a field training exercise demonstrated that the lack of sleep affected troops so badly that after a week they performed worse on cognitive tests than if they were sedated or legally drunk. In this study, the SEALs and Rangers showed severe degradation in reaction time, vigilance, visual pattern recognition, short-term memory, learning and grammatical reasoning skills. (See “Severe decrements in cognition function and mood induced by sleep loss, heat, dehydration and under-nutrition during simulated combat” by Harris R. Lieberman et al. in *Biological Psychiatry* which was published in 2005.)

Another group of studies examined more than 530 Soldiers, sailors and pilots during military survival training, including time in mock prisoner of war camps, to prepare them to withstand the mental and physical stresses

of capture. In these studies, exposure to acute stressors resulted in symptoms of dissociation (alterations of one's perception of body, environment and the passage of time), problem-solving deficits (as measured by objectively assessed military performance), and significant inaccuracies in working memory and spatial memory (as measured by eyewitness identification tests). (See "Accuracy of eyewitness memory for persons encountered during exposure to highly intense stress" by Charles A. Morgan III et al. in the *International Journal of Law and Psychiatry* which was published in 2004 and "Stress-Induced Deficits in working memory and visuo-constructive abilities in Special Operations Soldiers" by Charles A. Morgan III et al. in *Biological Psychiatry* which was published in 2006.) These findings corroborated with other studies that found multi-stressor environments lead to substantial degradation of executive control capacity and cognitive skills, and such degradation has been linked to battlefield errors, such as friendly fire incidents and collateral damage. (See D.R. Haslam's "The military performance of soldiers in sustained operations" in *Aviation, Space and Environmental Medicine* which was published in 1984; "Effects of caffeine, sleep loss and stress on cognitive

performance and mood during U.S. Navy Seal training" by Harris R. Lieberman et al. in *Psychopharmacology* which was published in 2002; K. Opstad's "Circadian rhythm of hormones is extinguished during prolonged physical stress, sleep and energy deficiency in young men" in the *European Journal of Endocrinology* which was published in 1994; "Sustaining Performance during Continuous Operations: The U.S. Army's Sleep Management System" by G. Belenky et al. in the *Pennington Center Nutritional Series*; and *Countermeasures for Battlefield Stressors*.)

Mind fitness training and performance. Optimal combat readiness requires three things: mission essential knowledge and skills, physical fitness and mind fitness. All three components are crucial for equipping warriors to handle the challenges and stressors of deployment. The military devotes substantial resources to the first two categories, both in terms of funding and time on the training schedule. However, there is virtually no focus on mind fitness training today. The Army's Battlemind program is a first effort to raise Soldiers' awareness of the psychological health issues associated with deployment, but Battlemind mostly occurs after Soldiers return home and provides no skills training.

Instead, it introduces them to the cognitive and psychological effects of being deployed, provides psychological debriefing sessions and helps them identify warning signs for when to seek help. In short, the military generally lacks proactive mind fitness training programs designed to give warriors skills that optimize performance and protect against the stressors of deployment.

Most military training is "stress inoculation training" because it exposes and habituates warriors to the kinds of stressors they will face while deployed. Paradoxically, however, as the previous section demonstrates, stress inoculation training depletes warriors' executive control capacity — that is, the mental capacity that allows us to focus on demanding cognitive tasks and/or emotionally challenging situations. As we explain below, mind fitness training may counteract this cognitive degradation that results from stress inoculation training. Therefore, it could complement existing military predeployment training, as it helps warriors to perceive and relate to deployment stressors differently. In other words, mind fitness training may provide "mental armor" to protect troops as they prepare for deployment and experience the stressors of deployment itself.



Optimal combat readiness requires three things: mission essential knowledge and skills, physical fitness and mind fitness. All three components are crucial for equipping warriors to handle the challenges and stressors of deployment. (Photo by SGT Travis Zielinski, U.S. Army)

Just as stress and trauma can functionally and structurally change the brain, so too can training, practice and expertise. The brain of an expert — such as surgeon, taxi driver or musician — is functionally and structurally different from that of a non-expert. In one study of London cab drivers, for example, researchers found that cab drivers have larger hippocampi than matched controls and that the longer an individual worked as a cab driver, the larger the hippocampus. The hippocampus is the brain region that controls conscious memory, obviously needed to navigate London's circuitous streets. These differences in hippocampus size were the result of experience and training as a cab driver, not of preexisting differences in the hippocampal structure. (See "Navigation expertise and the human hippocampus: a structural brain imaging analysis" by E.A. McGuire et al. in *Hippocampus* which was published in 2003.)

The London cab driver study highlights the well-documented theory of neuroplasticity, which states that experience changes the brain. (See *The Mind and the Brain: Neuroplasticity and the Power of Mental Force* by Jeffrey M. Schwartz and Sharon Begley.) Areas of the brain may shrink or expand — become more or less functional — based on experience. In other words, the brain, like the rest of the body, builds the "muscles" it uses most, sometimes at the expense of other abilities. This concept is something athletes, musicians and martial artists have known for a long time: with physical exercise and repetition of certain body movements, the body becomes stronger, more efficient and better able to perform those movements with ease. A similar process can occur with the brain: with the engagement and repetition of certain mental processes, the brain becomes more efficient at those processes. This improved efficiency arises because any time we perform a physical or mental task, the brain regions that serve task related functions show increased neuronal activity. Overtime, as we choose to build a new mental skill, the repeated engagement of the brain regions supporting that skill creates a more efficient pattern of neural activity, for example, by rearranging structural connections between brain cells involved in that skill. In other words, experience and training can lead to functional and structural reorganization of the brain.

Thus, there is a profound parallel between physical fitness and mind fitness. Athletes know that with repetition, physical fitness exercises can produce training-specific muscular, respiratory and cardiovascular changes in the body. They know that specific



Just as stress and trauma can functionally and structurally change the brain, so too can training, practice and expertise. (Photo by SrA Julianne Showalter, U.S. Air Force)

training will correspond to specific benefits and promote better recovery from specific injuries. For example, sprints can build fast-twitch muscles, while longer runs can teach the body to burn fat instead of glucose. Similarly, specific mental exercises may allow the mind to become more "fit" and better protected against certain types of challenges by neuroplastic changes in the brain.

Mind fitness in today's operational environment entails having a mind with highly efficient capacities for mental agility, emotional regulation, attention and situational awareness (of self, others and the wider environment). Just as physical fitness corresponds to specific enhancements in the body, mind fitness may correspond to enhancements in specific brain structures and functions that support these capacities. And, like physical fitness, mind fitness may be protective: it may build resiliency and lead to faster recovery from cognitive depletion and psychological stress. We propose that mind fitness can be maintained even in high-demand and high-stress contexts by regularly engaging in certain mental exercises. These exercises engage and improve core mental processes, such as working memory capacity, which lead to a more mentally agile, emotionally regulated, attentive and situationally aware mode of functioning.

This scientific understanding is starting to be recognized and applied with many recent research studies and popular books describing training programs to bolster mind fitness. (See *Train Your Mind, Change Your Brain* by Sharon Begley, *Train Your Brain: 60 Days to a Better Brain* by Ryuta Kawashima and *Train Your Brain: The*

Complete Mental Workout for a Fit and Agile Mind by Joel Levy.) These training techniques have existed for thousands of years, originating in Eastern spiritual traditions. In recent decades, they have been adapted for secular use, including in medical and mental health settings, corporations, prisons, and elementary schools. The most common and well-validated training program is mindfulness-based stress reduction; more than 250 U.S. hospitals offer mindfulness-based stress reduction programs, and more than 50 research articles document its utility in many domains. (See "Attention regulation and monitoring in meditation" by A. Lutz et al. in *Trends in Cognitive Sciences* which was published in 2008 and "Mindfulness Training Modifies Subsystems of Attention" by A.P. Jha et al. in *Cognitive, Affective and Behavioral Neuroscience* which was published in 2007.)

Mind fitness can be enhanced through a variety of training techniques, but the foundational skill cultivated in both MBSR and our MMFT program is called "mindfulness." *Mindfulness* has been described as a process of "bringing one's attention to the present experience on a moment-by-moment basis" (See "Mindfulness and Meditation" by G.A. Marlatt and J.L. Kristeller in *Integrating Spirituality into Treatment: Resources for Practitioners* which was published in 1999.) and as "paying attention in a particular way, on purpose, in the present moment and nonjudgmentally." (See *Wherever You Go, There You Are: Mindfulness Meditation in Daily Life* by Jon Kabat-Zinn.) Mindfulness differs from a more conceptual mode of processing information, which is often

the mind's default way of perceiving and cognizing. In other words, paying attention is not the same thing as thinking, although we often equate the two.

A growing body of empirical scientific evidence supports the efficacy of mindfulness-based interventions. Clinical studies demonstrate that civilian patients who participated in such programs saw improvement in many physical and psychological conditions and reported a decrease in mood disturbance from, and stress related to, these conditions. Similarly, numerous studies have documented how mindfulness training positively alters emotional experience by reducing negative mood as well as improving positive mood and well-being. (See P.C. Broderick's "Mindfulness and Coping with Dysphoric Mood: Contrasts with Rumination and Distraction" in *Cognitive Therapy and Research* which was published in 2005 and Ruth A. Baer's "Mindfulness Training as a Clinical Intervention: A Conceptual and Empirical Review" in *Clinical Psychology: Science and Practice* which was published in 2003.) Mindfulness training has also been shown to increase tolerance of unpleasant physical states, such as pain, (Consult Joshua Grant's presentation "Pain Perception, Pain Tolerance, Pain Control and Zen Meditation" at the Mind and Life Summer Research Institute on June 5, 2007.) produce brain changes consistent with more effective handling of emotions under stress and increase immune functioning. (See "Alterations in brain and immune function produced by mindfulness meditation" by Richard J. Davidson et al. in *Psychosomatic Medicine* which was published in 2003.) Finally, many studies have shown that mindfulness training improves different aspects of attention, which is the ability to remain focused on task-relevant information while filtering out distracting or irrelevant information. (See "Mindfulness Training Modifies Subsystems of Attention" by A.P. Jha et al., "Meditation and attention: A comparison of the effects of concentrative and mindfulness meditation on sustained attention" by E.R. Valentine and P.L.G. Sweet in *Mental Health, Religion and Culture* which was published in 1999 and "Mental Training Affects Distribution of Limited Brain Resources" by Heleen Slater

et al. in *PLoS Biology* which was published in 2007.)

While this research draws from civilian populations, its findings clearly have implications in the military context. These techniques have already been extended to war veterans with post-traumatic stress disorder, and preliminary results from this work suggest a reduction in symptoms. [Consult "Pilot Study of a Mindfulness based Group Therapy for Combat Post-traumatic Stress Disorder (PTSD)" A.P. King et al.] In addition, mindfulness training could help optimize warrior performance by cultivating competencies critical for the modern battlefield, such as improved self-regulation, better attentional skills and enhanced situational awareness.

Working memory capacity and mental armor. Mind fitness, as we have operationalized it here, comprises

"...mindfulness training could help optimize warrior performance by cultivating competencies critical for the modern battlefield, such as improved self-regulation, better attentional skills and enhanced situational awareness."

mental faculties critical for military effectiveness, such as mental agility, emotion regulation, attention and situational awareness. Interestingly, the cognitive neuroscience construct of "working memory capacity" has also been linked to these faculties. Working memory capacity is the ability to maintain relevant information online while resisting interference from irrelevant information. Growing evidence suggests that working memory capacity is tied to the ability to engage in abstract problem-solving and counterfactual thinking. Recently, neuroscientists report that in addition to these "cold" cognitive processes requiring a high degree of mental flexibility and agility, "hot" emotional regulation processes also rely on working memory capacity.

While individuals differ in their baseline working memory capacity,

everyone's working memory capacity can be fatigued and degraded after engaging in highly demanding cognitive or emotional tasks. (See B.J. Schmeichel's "Attention control, memory updating, and emotion regulation temporarily reduce the capacity for executive control" in the *Journal of Experimental Psychology: General* which was published in 2007.) Conversely, working memory capacity can be improved and strengthened through training. Studies have shown that individuals with higher working memory capacity have better attentional skills, abstract problem-solving skills and general fluid intelligence (that is, the ability to use rather than simply know facts). They also suffer less from emotionally intrusive thoughts and are more capable of suppressing or reappraising emotions when required. In contrast, individuals with lower working memory capacity have poorer academic achievement, lower standardized test scores and more episodes of mind-wandering. They are more likely to suffer from post-traumatic stress disorder, anxiety disorders and substance abuse, and are more likely to exhibit prejudicial behavior toward personally disliked groups. (See "Working memory span tasks: A methodological review and user's guide" by A.R. Conway et al. in *Psychonomic Bulletin & Review* which was published in 2005.) Thus, working memory capacity corresponds to an individual's

success at willfully guiding behavior while overcoming cognitive or emotional distractions or impulsive tendencies. Warriors with higher working memory capacity are more likely to have better mind fitness and thus be better equipped for responding to the cognitive and emotional challenges that come from preparing for and experiencing deployment. These warriors are also more likely to maintain an effective level of performance when confronted by obstacles, setbacks and distractions, and return to their baseline functioning after being exposed to stressors or traumatic experiences. Nonetheless, all warriors (even those with higher working memory capacity) are likely to suffer from some degree of working memory capacity degradation through the deployment cycle because the stressors of this time period are so depleting of cognitive and emotional

resources. Moreover, an individual's position within the military command structure may exacerbate the problem because recent evidence suggests that being lower in a power hierarchy reduces working memory capacity. (See "Lacking power impairs executive functions" by P.K. Smith et al. in *Psychological Science* which was published in 2008.)

Thus, an important component of optimal combat readiness should be to maintain or increase baseline levels of working memory capacity, despite the increase in stressors over the deployment cycle. Because working memory capacity can be strengthened through training, performance on both cold cognitive processes and hot emotional regulation can be enhanced. Maintaining or enhancing warriors' baseline levels of working memory capacity could have cascading effects for effective decision making, complex problem solving and emotional regulation processes, all of which are heavily taxed over the deployment cycle and are crucial for mission effectiveness. In other words, training to improve working memory capacity may provide "mental armor" to protect against impending deployment-related degradation in mind fitness.

MMFT. Mindfulness-based Mind Fitness Training is a 24-hour course that is taught over eight weeks in groups of 20 to 25 service members. Mindfulness-based Mind Fitness Training is based on the well-established mindfulness-based stress reduction course known to improve attentional functioning and reduce the negative effects of stress. However, Mindfulness-based Mind Fitness

Training is tailored for the military predeployment training cycle, with real-world examples from the counterinsurgency environment that show how mind fitness skills can enhance performance and mission accomplishment. During the course, troops learn about the stress reaction cycle and its effects on the mind and body. They also learn how mind fitness training can boost resilience to stress. Most importantly, and unlike the Army's Battlemind training, Mindfulness-based Mind Fitness Training provides skills training through mind fitness exercises. These exercises are practiced 30 minutes a day. Some exercises build concentration by focusing on one object of attention, such as a particular body sensation. Others build situational awareness and non-reactivity through wider attention on internal and external stimuli. And some exercises use focused attention to reregulate physiological and psychological symptoms that develop from traumatic or stressful experiences. The exercises are incorporated into physical training and other mission essential tasks and completed during the duty day, in groups and/or individually. Thus, an important component of the course is engaging in Mindfulness-based Mind Fitness Training exercises each day.

We recently conducted a pilot study of Mindfulness-based Mind Fitness Training with a detachment of 31 Marine Reservists, who received the training before they deployed to Iraq. (In March 2009, they returned home from this deployment.) While some Marines resisted the effort required by the training, the initial exposure was relatively positive.

The entire detachment received training, and Mindfulness-based Mind Fitness Training's didactic information and group practices helped to socialize the concept. Once deployed, the Marines personalized their approach to the Mindfulness-based Mind Fitness Training exercises, differing in how they incorporated them into their daily routines. From their anecdotal reports during and after the deployment, it appears some Marines continued the exercises during their down time, some incorporated them into their physical fitness regimes, some employed them as part of their permission rehearsals and some employed them to keep themselves alert and focused while on missions. Many Marines reported using the exercises at bedtime, which they said helped them to quiet their minds, fall asleep faster and sleep more soundly.

Before and after Mindfulness-based Mind Fitness Training training (before they deployed), the Marines participated in a battery of behavioral tasks to measure their cognitive capabilities. We had predicted that the increase in stressors during predeployment training would degrade the Marines' cognitive performance. However, statistical analysis shows that the Marines who spent more time engaging in mind fitness exercises (on average, 10 hours outside of class) saw an improvement in their cognitive performance compared to Marines who spent less time engaging in the exercises (on average, two hours outside of class). (See "Examining the Protective Effects of Mindfulness Training on Working Memory Capacity and Affective Experience" by A.P. Jha et al. which was reviewed by *Emotion*.) Specifically, despite the real increase



Dr. Michael J. Roy conducts a demonstration of a life-like simulator that represents a new form of post-traumatic stress disorder treatment with SGT Lenearo Ashfordon in Washington, D.C., Sept. 16, 2008. (Photo by John Kruzell)

“...mind fitness training’s beneficial effects could continue long after the deployment is over, increasing the likelihood that warriors will be ready, willing and able to deploy again when needed.”

in stressors during the predeployment period, the Marines who engaged in more mind fitness training maintained the same perceived stress level and preserved or even improved their working memory capacity over their initial baseline.

In contrast, the Marines who engaged in less mind fitness training experienced an increase in their perceived stress levels and the predicted decrease in their working memory capacity. This degradation in their working memory capacity produced test scores of working memory capacity on par with populations that have suffered psychological injuries such as post-traumatic stress disorder and major depression. (See “Working memory capacity and suppression of intrusive thoughts” by C.R. Brewin, and L. Smart in the *Journal of Behavioral Therapy and Experimental Psychiatry* which was published in 2005, “Reduced autobiographical memory specificity and post-traumatic stress: Exploring the contributions of impaired executive control and affect regulation” by T. Dalgleish et al. in the *Journal of Abnormal Psychology* which was published in 2008 and “Reduced specificity of autobiographical memory and depression: The role of executive processes” by T. Dalgleish et al. the *Journal of Experimental Psychology: General* which was published in 2007.) It is important to note that this degradation in working memory capacity occurred before deployment, and thus does not reflect the additional stressors of the deployment itself. The apparent costs of the predeployment context are striking, given that the intention of the predeployment training is to prepare service members physically, emotionally and cognitively for the stressors of deployment. Our findings highlight the potential importance of providing mind fitness training within the predeployment time period to buffer against working memory capacity depletion.

While we have not yet fully analyzed the data from their postdeployment cognitive behavioral testing, it is clear from a postdeployment survey that the Marines

continued to engage in mind fitness training and/or use the skills they learned while deployed. Sixteen percent of the Marines said that they “practiced regularly while deployed,” while 35 percent gave neutral responses and 48 percent said they did not practice regularly. In contrast, 26 percent of the Marines said that they practiced mind fitness exercises “after particularly stressful or traumatic experiences,” while 35 percent gave neutral responses and 38 percent said they did not. Perhaps more importantly, 54 percent of the Marines said that they “used the skills learned in this course downrange,” while 27 percent gave neutral responses, and the rest said they did not use Mindfulness-based Mind Fitness Training skills while deployed.

Thus, while only 16 percent practiced mind fitness exercises regularly during the deployment, more than a quarter used the practices to reregulate themselves after stressful experiences and more than half used Mindfulness-based Mind Fitness Training skills during the deployment. These findings suggest the need for adding more structured mind fitness exercise sessions into a unit’s daily schedule during deployment. They also highlight again the parallel to physical fitness: just as building muscle requires repetitive physical exercise, improving cognitive and emotional performance requires engaging in mind fitness exercises in a sustained, disciplined manner. While mind fitness skills are quickly and easily taught, they require ongoing commitment to develop and strengthen over time.

We acknowledge several limitations to this pilot study. Our cohort was a convenience sample, consisting of a detachment that agreed to receive training. There was no wait list or active control group, although we are currently gathering control group data for further analysis. We think this weakness was partially mitigated by our use of well validated cognitive behavioral instruments shown to be stable over time. This minimizes simply reflected measurement artifact. Nonetheless, the fact

that all Marines started with similar working memory capacity scores and that changes in their scores over time correlate, in a statistically significant way, with the amount of time spent engaging in mind fitness exercises highlights the need for further study. To this end, we have recently received funding from the Department of Defense to examine how mind fitness training can build resilience and combat readiness among Army Soldiers. The first study will compare Mindfulness-based Mind Fitness Training to the Army’s Battlemind program in a predeployment context. The second study will compare different versions of Mindfulness-based Mind Fitness Training in a non-deployment context, to see which version is most effective at producing optimal cognitive and psychological performance among warriors.

As this article has shown, mind fitness training can immunize against stress by buffering the cognitive degradation of stress inoculation training and by permitting more adaptive responses to and interpretation of stressors. Mind fitness training can also enhance warrior performance by cultivating competencies critical for today’s security environment. Finally, beyond its immediate effects for managing stress and enhancing mission performance, mind fitness training is protective: it builds resiliency and leads to faster recovery from cognitive degradation and psychological injury. While warriors may choose to engage in mind fitness exercises to optimize their performance downrange, the protective effects will still be accruing — likely leading to a decrease in psychological injury upon returning home. As a result, mind fitness training could reduce the number of warriors in need of professional help and thereby reduce caregiver burnout among Armed Forces’ chaplains and medical and mental health professionals. In other words, mind fitness training’s beneficial effects could continue long after the deployment is over, increasing the likelihood that warriors will be ready, willing and able to deploy again when needed.

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“First line supervisors, battle buddies, friends and loved ones are a Soldier’s first line of defense against the threat of suicide.”

General Peter W. Chiarelli

Photo illustration by Jason Kelly (Fires Bulletin). Original photo by SSG Justin Weaver (U.S. Army).

Saving Soldiers from suicide: Army seeks to stamp out stigma

By Kim Reischling
Fort Polk Public Affairs Office

The phone call devastated his world, crumbling to dust his hopes and dreams for the future.

Several days elapsed, days filled with the mind-numbing grief that follows the end of a once-loving marriage. He felt helpless; thousands of miles away, deployed to Iraq, there was little he could do. He somehow got through those days, unthinkingly making the motions because his mind was elsewhere.

To rid himself of the physical memories, he placed the items she had sent in a box, each gift, each letter summoning a memory that magnified his loss. The wedding ring was the last to go. As he twisted it off his finger, something snapped inside. What snapped? It’s hard to define.

Perhaps he was overwhelmed by the mistaken belief that his burdens had become insurmountable, that life was no longer worth living.

In that instant he made an irrevocable decision. Grabbing his rifle, Specialist Joe Sanders placed the muzzle against his throat and pulled the trigger.

More than 33,000 people in the United States committed suicide in 2006. That year, in fact, suicide was the 11th leading cause of death. For every one of those deaths, an estimated 12 to 25 people attempted suicide, according to the National Institute of Mental Health.

SUICIDE RATES ARE RISING, AND THAT HOLDS TRUE EVEN WITHIN THE ARMY. In 2008, 140 Soldiers in the active-duty Army took their own lives. That puts the 2008 active-duty suicide rate at 20.2 per 100,000 – the highest ever for the Army, according to Army reports.

Proactive stand. The Army is taking a proactive stance to combat suicide.

“It is clear to all of us that the increased suicide rate in our Army represents an unacceptable loss to the Army and the nation,” said Vice Chief of Staff of the Army General Peter W. Chiarelli, in a report dated April 19, 2009. That’s why

the Army Comprehensive Soldier Fitness Program was developed, to raise “mental fitness” to the same level the Army considers physical fitness.

A high-velocity bullet entering the brain almost always causes massive, irreversible damage, but that wasn’t the case for Sanders. He survived his attempted suicide because his M-4 failed to fire.

Sanders said he immediately went into “Soldier mode. I had to know why my weapon malfunctioned, so I took it apart and discovered the firing pin was missing,” he said.

Sanders confronted the only other person who had access to the weapon: His roommate and battle buddy, Specialist Albert Godding. “I asked Godding if he knew where the firing pin was and he told me he had taken it out. Then he asked me, ‘How do you know I took it out?’”

With that question, a flood of emotions spilled from Sanders – grief and despair over his failed marriage; anger over what he perceived as a betrayal by Godding; shock at being alive when only moments ago he was facing death. Sobbing, Sanders confessed to his battle buddy that he had tried to take his own life. Godding immediately called for a medic.

Godding’s vigilance saved Sanders life.

“After the phone call, Joe grew distant,” Godding said. “He started talking about killing himself while on guard duty. He said it jokingly, and I really didn’t think he was serious. But it weighed on me. So while he was out one night, I took the firing pin out of his weapon as a precaution. I questioned myself about doing that, but I felt it was necessary,” Godding said.

Sanders received the intensive counseling and support he needed.

“There was no prejudice against me because of what I had done,” Sanders said. “And maybe I’m just lucky, but my chain of command was very helpful. There was no doubt that they were concerned about my welfare.”

Climate changed. It wasn’t just luck. The Army climate has changed. Open communication and positive encouragement by command at all levels is the key to stemming the rise in suicidal behaviors,

Chiarelli said.

“In my recent visits to the field, I’ve seen how the stigma related to seeking behavioral health treatment represents one of the greatest barriers to individuals accessing care and improving overall performance and well-being.”

PART OF HELPING SOLDIERS IS MAKING IT PERMISSIBLE FOR THEM TO HELP THEMSELVES, THE GENERAL SAID. That means changing the culture so Soldiers are not ashamed to seek out mental health care. Chiarelli said recent assessments in theater have shown more Soldiers are willing to seek out mental-health care without the concern that it is perceived as weakness or that it will affect their careers.

And Sanders’ career is going strong, said Command Sergeant Major Sheon Alderman, 4th Brigade Combat Team, 10th Mountain Division.

“This Soldier is motivated. I asked him if he was ready for the promotion board and he was. Next he attended the Soldier of the Month board and was neck to neck with the winner. Then he went to the Warrior’s Leader Course and he did well. We’re going to be pinning sergeant’s stripes on this Soldier very soon,” said Alderman.

Sanders hopes that by speaking out, he can help other Soldiers understand that they don’t have to be embarrassed or ashamed to get help.

“If I can help one Soldier out there, then telling my story publicly is well worth it. Getting help is the strong thing to do. It takes courage to speak out instead of hiding those emotions away,” he said.

Chiarelli said that “first line supervisors, battle buddies, friends and loved ones are a Soldier’s first line of defense against the threat of suicide.”

Sanders fervently agreed.

“I get to be here today. I get to someday become a great husband and a father. I get to lead Soldiers. I get to do what I love to do because of my battle buddy, because he saw the signs that something was wrong and acted on them.”

Editor’s note: This article was released on the Department of the Army’s website, Sept. 21, 2009. Since then, reports indicate the number of Soldier suicides in 2009 exceeded the total for 2008.

Restoring balance through reintegration

WE ARE AN ARMY THAT REMAINS OUT OF BALANCE WITH A FEW MORE TOUGH YEARS AHEAD OF US. FORTUNATELY, WE HAVE MADE SUBSTANTIAL PROGRESS OVER THE PAST SEVERAL YEARS WITH THE HELP OF OUR DEPARTMENTAL AND CONGRESSIONAL LEADERS. WE'VE EXPANDED OUR FORCE AND TRANSFORMED IT TO BE MORE EFFECTIVE IN THE TYPES OF CONFLICTS WE ARE FIGHTING TODAY. TODAY THE ARMY IS 70,000 PEOPLE LARGER THAN IT WAS JUST FIVE YEARS AGO ... 40,000 PEOPLE LARGER THAN IT WAS JUST TWO AND A HALF YEARS AGO ... WITH 11 MORE COMBAT BRIGADES AND SUBSTANTIALLY MORE ENABLING FORCES. WE ARE BETTER POSITIONED NOW — THAN WE WERE TWO YEARS AGO — TO ACCEPT SOME INCREASED DEMAND, BUT WE ARE NOT OUT OF THE WOODS YET."

GENERAL GEORGE W. CASEY, CHIEF OF STAFF OF THE ARMY

By LTC Michael T. Morrissey

The current war is the longest the U.S. has conducted with an all-volunteer force. Conflicts in Iraq and Afghanistan continue as the president recently announced the decision to send an additional 34,000 troops to Afghanistan. Beyond Iraq, Afghanistan, well-known threats from global terrorism, China and North Korea, there are also insidious dangers to the U.S. that threaten to destabilize the security of national interests in ways that would require substantial U.S. military involvement beyond the current commitment. They include unconventional threats; political extremism, toxic anti-American populism, nuclear proliferation and expanding political and economic vulnerability (See "Toward a Risk Management Defense Strategy" a study by Nathan P. Freier).

General Casey appropriately explained the future as one of persistent conflict, "a period of protracted confrontation among states, non-states and individual actors, that are increasingly willing to use violence to achieve their political and ideological ends," in his statement before the House Committee on Appropriations, Military Construction, Veteran's Affairs and Related Agencies on May 6, 2009. In this demanding environment, the Army plays an essential role protecting national interests and American freedoms. As an experienced

force provider, General Campbell, U.S. Forces Command commander, aptly explained the challenge in this environment, "While in a persistent conflict, we continue to generate forces in a condition where the global demand for land forces exceeds the available supply. Despite this, our nation and the combatant commanders expect the Army to produce a sustained supply of trained and ready forces and since 2003, we have met those expectations." (See General Charles C. Campbell's article "ARFORGEN: Maturing the Model, Refining the Process," in the June 2009 edition of *Army Magazine*.) The combined effects of an extended war along with insufficient recovery time for personnel and families have resulted in readiness consumption at an unsustainable rate impacting strategic flexibility and causing symptoms at the Soldier and family level.

Symptoms. While the Army has a combat-experienced force like no other time in its history, the demand has taken a personal toll. In 2007, Casey explained the Army was not broken, but out of balance. Although there appears to be little research on the subject indicating a link between an extended war with insufficient recovery time and a negative impact on Soldiers and families, fissures in the force's human dimension are evident. Since January 2009, 211 Soldiers, active and reserve, are suspected to have committed suicide (See Ann Scott Tyson's article "Army's Record

Suicide Rate 'Horrible,' General Says" in the *Washington Post*). Up from 128 in 2008, the steady increase during the last four years does not have a direct correlation to the long war, but is believed to be a symptom. Despite the many programs designed to help struggling married couples cope with deployment, the military divorce rate was 3.6 percent for fiscal year 2009, an increase from previous years according to Pauline Jelinek in his Associated Press article "Military Divorces Increasing from War Stress." In addition, in his *USA Today* article "Alcohol Abuse by GIs Soars Since '03," Greg Zoroya states, "The rate of Army Soldiers enrolled in treatment programs for alcohol dependency or abuse has nearly doubled since 2003 — a sign of the growing stress of repeated deployments in Iraq and Afghanistan, according to Army statistics and interviews."

Approximately 20 percent of returning veterans also suffer from post-traumatic stress disorder or depression (See, "Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery," a study by Terri Tanielian and Lisa H. Jaycox, RAND Corporation). Finally, Rand Corporation released another study, "The Experience of Children from Military Families," on 7 December 2009, which only begins to address the symptoms of extended, multiple deployments on families such as increased emotional difficulties.

Multiple deployments and extended separations with insufficient recovery time incur a mental toll and cause wounds that are not easily visible. Suicide, divorce, substance abuse and behavioral health issues clearly do not define our great Army institution. Although each case is unacceptable, they are but a small percentage compared to the overall force. However, they are symptoms of an Army out of balance and have the potential to proliferate and erode readiness.

Restoring balance. Army leadership is working aggressively to address the complex challenge of rebalancing the force, while keeping its dominant edge in the 21st century. Restoring balance requires a comprehensive approach, including increasing Army end strength, transitioning from a garrison-based, Cold War operational set to an expeditionary force, transforming to modular brigade formations, realigning bases and implementing the Army Force Generation model. In addition, our leadership's commitment to end Stop Loss and 15 month deployments plus increase boots on the ground-dwell time to (1 year deployed and 2 years at home for active units and 1 year deployed and 4 years at home for the Reserve Component) is having an effect and, ultimately, will help reduce stress on the force.

Equally important, restoring balance requires a focus on Soldiers and families, a concerted effort to reduce the mental and physical toll of a committed expeditionary Army. On March 26, 2007, Secretary of the Army Preston M. "Pete" Geren approved implementation of the Deployment Cycle Support Directive, which codifies the need for deploying Soldiers and Department of the Army civilians to receive the opportunity for personal reconstitution, family reunion/reintegration and reestablishment of personal readiness. In the last few years, Congressional, Department of Defense and Army leaders committed resources and implemented programs to restore the wellbeing of Soldiers and families. In October 2007, Secretary Geren and General Casey unveiled the Army Family Covenant, an incredible pledge that codifies renewed support to Army families.

The Army recently instituted a Comprehensive Soldier Fitness Program to build resiliency and prepare Soldiers better for the challenges associated with multiple deployments. Family life counselors and resiliency teams are now within brigades to deal with mental fitness proactively. The Army's in-depth suicide awareness campaign also is beginning to show positive signs. On December 9, 2009, the Vice

Chief of Staff of the Army, General Peter W. Chiarelli, directed leaders to address behavioral health support during initial and subsequent performance counseling.

These are just a few of the many programs, and it is heartening to see the investment and commitment. However, programs and policies alone will not restore nor recover Soldiers and families. Ultimately, rebalancing the all-volunteer force rests on dedicated leaders at all levels, conducting detailed planning and focused execution to ensure these programs are used and achieve their objectives. Easy answers and effortless solutions will not suffice. Restoring balance requires an appreciation of the challenge at hand. It requires dedication and follow through on a key component of restoring balance — reintegration. This article focuses on Soldier/family reintegration and proposes a holistic approach beginning when a unit is notified.

Before deployment. To set conditions for successful reintegration, preparation begins when a unit is notified of a deployment. Soldier and family readiness programs must be planned and executed with the same detail and command emphasis as pre-deployment training. Approximately 56 percent of the force is married, so incorporate family-related activities into the road to war training plan. Commanders

must identify caring, dependable volunteers to lead unit family readiness groups. Early identification allows for these volunteers to attend necessary training and begin the team-building process within their battery family and across the battalion. Schedule regular sessions where the volunteers come together to share ideas and information.

Establish commander's intent early so there are no misunderstandings during the deployment. Empower and provide family readiness group leaders with the information they need to be successful; a simple technique of alerting a family readiness group leader of new arrivals goes a long way toward integration. Command presence at family readiness group events is a must, but understand when the group may want to meet without "green-suiters." Without command emphasis, you'll find little support from subordinates. In addition, battalion commanders must select a dependable family readiness support assistant early. Don't be confused, the family readiness support assistant does not run the program; he or she supports the command team, family readiness group and families. When done right, a family readiness support assistant is an amazing resource.

As part of planning and preparation, commanders, in conjunction with their family readiness support assistant, schedule Army Community Service programs such



PFC Jon Moss kisses his two-month-old daughter, Chloe, goodbye following his deployment ceremony at Fort Sill, Okla., Dec. 7, 2009. (Photo by Jason Kelly, *Fires Bulletin*)

as “Building Family Resiliency,” “Cycles of Stress” and “Stress Management” for Soldier and families. These events allow Soldiers and loved ones to begin preparation and realize the emotions they’re feeling are normal. They also encourage discussion on important topics such as finances, power of attorney and child care. Include children in family programs when appropriate. You’d be amazed at the benefit of children discussing their own ranges of emotions.

A conscious effort must be made to ensure spouses understand the Army casualty notification process. Single parent Soldiers or dual military parents must decide who they want to care for their children during the deployment. Once their family care plan is complete, the commander must call the designated provider and confirm to validate the plan. In support of information flow, a simple technique is for the command team to mail each family a personal letter addressing the importance of family readiness and highlighting upcoming unit family events. Besides ensuring the widest information dissemination, a personal letter will confirm or deny whether or not the unit has accurate addresses.

Activities should not be simply instructional. Successful teams will plan and resource Soldier/family cohesion events to draw out families and build a sense of camaraderie. These events are important, developing trust and allowing spouses to establish relationships with other spouses and share concerns. Done right, unit events, such as BBQs, picnics, dinners and fall festivals to name a few, nest well with information related briefs. Finally, be patient, but persistent. It may take a while to draw young families into unit activities. It is important for families to attend pre-deployment activities so they understand the many resources available to them and how to prepare for the deployment separation. For some Soldiers, there may be a belief, “my spouse is not in the Army; I don’t want her involved.” Attack this mindset head on, not as an invasion of privacy, but simply to support family readiness and prevent potential problems later.

Leaders, first-line supervisors through commanders, should have accurate information on families within their units: first or multiple deployers, Exceptional Family Member Program, families intent on remaining local during the deployment or moving back home, English as a second

language and whether or not the spouse has a driver’s license. Encourage the Soldier and spouse to discuss and establish goals during the deployment such as financial and educational. This will give them a common aim to strive for and encourage discussion. Early family preparation pays big dividends for a successful reintegration and mission accomplishment. As then-Army Chief of Staff, General John A. Wickham explained in his white paper titled, “The Army Family,” if a Soldier is worried about his family, he’s not focused on the mission; a healthy family environment allows Soldiers to concentrate fully on their mission.

Although the bulk of this discussion deals with married Soldiers and families, equally plan for and prepare single Soldiers. Monitor “at risk” Soldiers and families especially as the deployment date draws closer. Additional stress may cause a regrettable incident if preventive measures are not in place. Finally, organize and stand the rear detachment up within a month or two of notification, so the commander and command sergeant major can coach the leaders and establish clear expectations.

“Communication throughout deployment does not guarantee an easy deployment or reintegration, but it can facilitate success.”

Selecting the rear detachment command team will be an important choice; only the commander and command sergeant major will really know if the right choice was made or if they simply assumed risk and took all the stars forward.

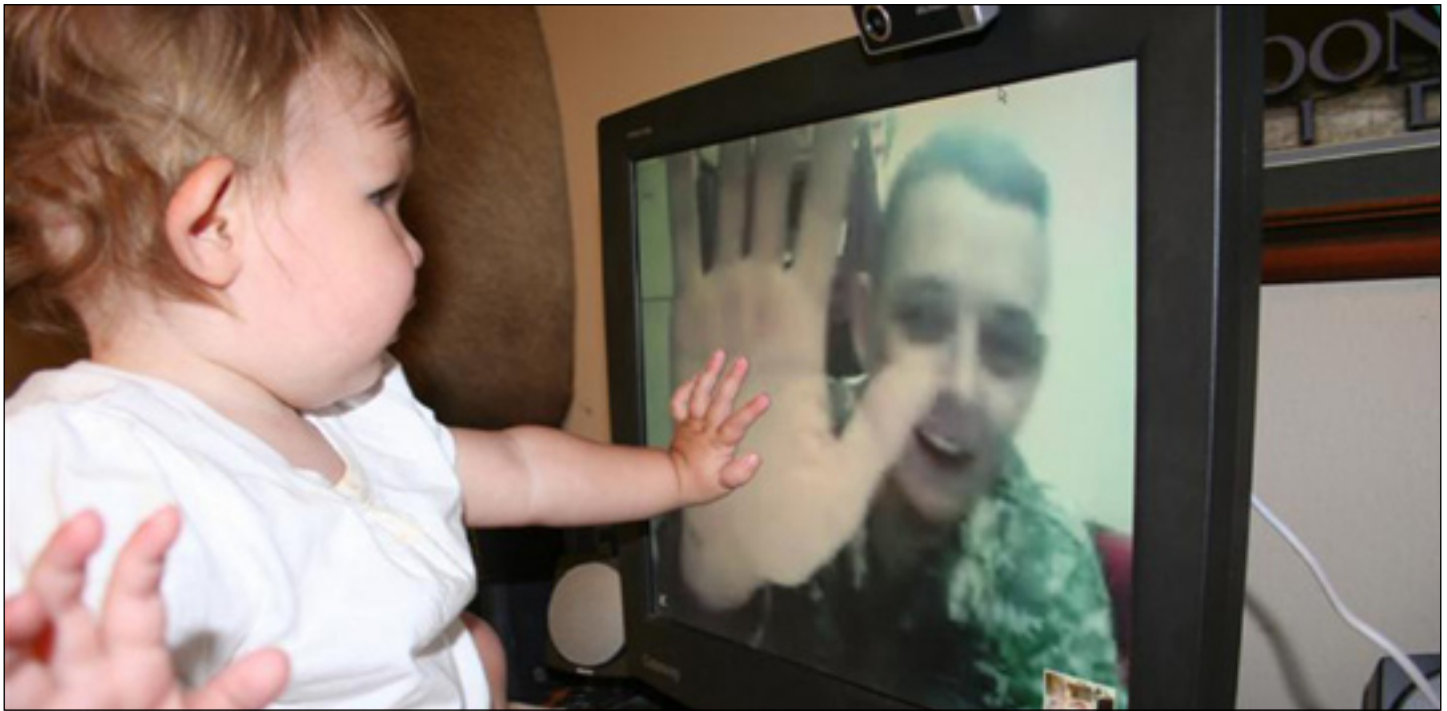
Counsel the rear detachment command team in writing and review the useful reference *U.S. Army Rear Detachment Commander’s Handbook* that they should keep close throughout the deployment. Involve the rear detachment in each component of the unit train up. For example, include the rear detachment in unit mission rehearsal exercises so events involve their actions and decision making as well. Rehearse and exercise battle drills such as casualty, serious injury of a spouse and Red Cross. Make sure these tasks are well-understood by both leaders in the rear detachment and forward unit. Do not allow the first time they are executed to be the real thing. These techniques early during the deployment cycle have a direct impact on a successful deployment and ultimately redeployment/reintegration.

Actions during deployment. The train up, deployment, relief-in-place and transfer of authority will go by rapidly at an astonishing pace. Soon enough, the unit will be conducting operations and focusing on mission accomplishment. During this phase in the deployment cycle, there are three areas of communication that not only support the mission, but also set conditions for successful reintegration — Soldier/family, engaged leaders and cross-talk between the forward unit and rear detachment.

Soldier/family. Communication between the Soldier and family is paramount and can take any form — phone, email or webcam. Although it varies based on services available in theater, encourage Soldiers to communicate with their families routinely and incorporate it into their battle rhythms. Family discussion on progress toward achieving those goals established before deployment is important and helps ease the separation. Discussion and appreciation of the challenges each side faces is healthy. Communication throughout deployment does not guarantee an easy deployment or reintegration, but it can facilitate success.

The unit can help them stay connected by something as simple as having routine family-oriented video teleconferences and an effective mail operation. In addition, photos or videos regularly published on a unit website or mailed back enable family members to see their loved ones in their environments. Letters sent by the command team to spouses or loved ones, such as mom or dad, highlighting positive events are also helpful. Communication also facilitates rumor control. Transparency in unclassified unit operations or decisions will fill a gap unfortunately filled by a rumor otherwise. Finally, sustaining battle buddies both forward and in the rear to include families is another safeguard to welfare. Battle buddies with the personal courage to help if a situation arises are a tremendous resource.

Engaged leaders. Active listening and counseling do not stop while deployed. Leaders must continue to be engaged with their Soldiers. Counseling requires focused discussion not only on performance, but also on concerns and stress that may impact performance. It requires leaders to understand Soldier fears, motivations, family background, domestic situation, goals, personalities, previous combat



LTC Nathan Blood, brigade effects coordinator for 4th Brigade Combat Team, 10th Mountain Division (Light), Multi-National Division–Baghdad, shares a high-five with his 16-month-old daughter, Mackenzie, during a web camera communication, Aug. 16, 2008. Blood was high-fiving Mackenzie from Forward Operating Base Loyalty, Iraq, and she returned it from Fort Polk, La. (Photo courtesy of 4th Brigade Combat Team, 10th Mountain Division Public Affairs)

experience and an appreciation of their stressors. Because of their involvement before deployment, the leader will have a good sense of their Soldiers' families. Engaged leaders will be conscious of their Soldier's change in behavior and involved to determine what may be troubling him. Leaders also must know the signs of stress not just in their Soldiers, but also in themselves.

Foster a desire within the team to win and actively maintain team morale through esprit de corps events. Continue to develop a sense of unit identity, and coach effective methods to deal with stress, such as physical training. Leaders can use the Unit Risk Reduction Leader Tip Card for reference when assessing Soldiers. R&R affords an opportunity to discuss some aspects of reintegration before and after leave is taken. R&R either may help reintegration or act as catalyst for problems later, but requires some preparation by leaders depending on a Soldier's situation. Be alert for distinct changes in behavior before and after R&R. As they did in garrison, leaders must closely track their "at risk" Soldiers. This is not "NCO business," but leader business. This does not mean those Soldiers are labeled or stigmatized. It simply means they may be carrying around added stressors that require additional leader focus. Include special emphasis for those involved in Family Advocacy Program before the deployment or involved in domestic incidents. Finally,

command team battlefield circulation will not only provide valuable tactical situational awareness, but also insights into unit morale and cohesion and offer Soldiers an opportunity to share concerns. Actively use the chaplain to assess the human dimension and as a directed telescope when necessary.

Cross-talk between forward unit and rear detachment. As part of the battle rhythm, there must be routine cross-talk between the forward and rear elements at both command and staff levels. Green-tab discussion and assessment does not happen only in theater. The rear detachment and family readiness group provide invaluable feedback on the health of families to forward leaders. As situations develop on either side, cross-talk on relevant information may enable problem-solving, kill rumors and avert potential problems, ultimately supporting reintegration. Throughout the deployment, situational awareness in areas such as R&R and incidents both in and out of theater help leadership be preventive rather than reactive, especially as redeployment approaches.

Redeployment and reintegration. Redeployment planning begins approximately four months out. Reintegration must be an integral portion of redeployment planning and requires the same focus. Coordination must be done to ensure the rear detachment and installation is prepared to receive the unit. Cross-talk

between forward and rear units becomes imperative as redeployment approaches. As the redeployment date draws closer, commanders must reassess their "at risk" Soldiers and determine those who may have readjustment problems whether domestic, financial, alcohol, drug or driving related. The rear detachment commander and first sergeant must all be conscious of "at risk" Soldiers and/or families and be prepared if a problem arises during reunion.

Once a detailed plan is in place, forward leaders can facilitate its success by ensuring their Soldiers accomplish the in theater pre-deployment and reintegration tasks and training. In theater training will facilitate leader discussion with Soldiers and set realistic reintegration expectations at the individual level. For predictability, Soldiers and families should know the reintegration training plan from the seven half day directed schedule through unit events and block leave. This will set expectations and limit frustration when they arrive at home station. They will need to understand the purpose of unit reintegration events to prevent a "check the block" mentality.

It is highly recommended that the rear detachment and family readiness group use Army Community Services and conduct redeployment and reunion training as well for family members also to set expectations. In addition, spouses should be informed on the unit's post-redeployment training plan after redeployment and the purpose

of events. Without this approach, spouses may become frustrated and question why their Soldier must report to work after being deployed for 12 months.

With reintegration training complete and expectations set, Soldiers and families are prepared for the reunion. Soldiers and families may experience a wide range of emotions before and during the reunion. According to the Deployment Guide for Families of Deploying Soldiers, there are five phases associated with reunion — pre-entry, reunion, disruption, communication and normal. (For more information on the emotional effects of deployment, see “The Emotional Cycle of Deployment,” by Kathleen Vestal Logan, in *Proceedings* and “Mission Readiness and Stress Management” by the United Nations Secretariat. For information on post-redeployment emotions, such as overcoming anger, sleeping better, spiritual fitness and handling stress, see www.afterdeployment.org and www.militaryonesource.com. There is a vast array of resources a Soldier or family member can download or order to include a 1-800 line for family members. Encourage Soldiers and families to understand the emotions tied to each phase.

As Soldiers, leaders will experience their own emotions and must balance them with the care of their Soldiers. After reunion, success continues with leader emphasis on post-redeployment training. Components of reintegration training vary slightly by major command, but Battlemind Training

I, “Transitioning from Combat to Home” and Battlemind Training II, “Continuing the Transition Home” is only helpful if taken seriously. During reintegration, the rear detachment maintains command and control to facilitate redeploying leaders also going through training and reunion. Ensure leader contact information and important numbers like the chaplain are updated and disseminated. To avoid alcohol-related incidents, leaders should address responsible drinking. The ubiquitous presence of alcohol may frustrate efforts, such as domestic incidents and driving under the influence, but ensuring Soldiers are reacquainted with responsible drinking will go a long way. Finally, be vigilant for warning signs such as serious financial difficulties, domestic challenges and a significant change in behavior.

Beyond reintegration — follow through. With formal reintegration training complete, complete reintegration is far from over. Deliberate preparation is conducted before anyone departs for block leave — risk assessments, counseling, refresher training for privately owned motorcycles, and license and insurance verification.

Before block leave. Pre-block leave safety briefs from the commander and command sergeant major allow Soldiers to hear the importance firsthand, but alone, do little in regard to block leave success. Coach leaders to understand that risk management must be thorough, assessed throughout the

planning process and continually updated as conditions change. Enforce the Travel Risk Planning System tool for those traveling. Identify hazards and implement controls to reduce risk associated with each Soldier travel plan. NCOs must talk with their Soldiers about the risks associated with drinking and driving, not wearing seatbelts and proper conduct of standards and discipline to prevent needless injury or loss of life. A system as simple as a safe ride program where members carry unit cards with chain of command contact information and local taxi numbers reduces risk of driving under the influence related incidents at home station. Keep money with the staff duty to help Soldiers get a safe taxi ride back on post.

Continue the command theme and understanding among Soldiers that they serve something greater than themselves; they represent their unit and the Army by their actions. Reinforce the message at every opportunity as you conduct routine safety and discipline briefs. Talk with Soldiers about the absolute tragedy of completing a successful mission in theater only to lose a Soldier to an unsafe act at home station. It is naïve to believe a leader can prevent every incident, but controls must be in place to reduce them.

As part of block leave preparation, leaders again reassess those “at risk” Soldiers to determine if additional measures must be employed. It includes Soldiers and families “at risk” due to stress incurred from redeployment, domestic friction, post-traumatic stress disorder, alcohol/drug abuse, traumatic brain injury or simply problems with readjusting. Incidents during reunion may require reassessment. Include Army suicide refresher training and have candid counseling and discussions with Soldiers about this sensitive topic. Ensure they understand there is no shame in seeking help; there is no stigma. There may be “at risk” Soldiers identified that have suicide stress factors. Leaders must look them in the eyes, ask the hard questions and get help if necessary. Simply listening will go a long way. Finally, explain to those warrior leaders who excelled in a combat environment, that deliberate pre-combat inspections are just as necessary before block leave as they were before a combat operation. Then, Soldiers can enjoy well-earned leave safely.

Post block leave. Once block leave is complete, commanders should reintegrate the unit thoroughly so they don’t have a combination of those that deployed, new Soldiers and rear detachment personnel. After a lengthy deployment and with key leader turnover, there may be a sense that



According to the Deployment Guide for Families of Deploying Soldiers, there are five phases associated with reunion — pre-entry, reunion, disruption, communication and normal. Pictured is the homecoming ceremony for B Battery, 2nd Battalion, 18th Field Artillery at Fort Sill, Okla., Aug. 12, 2009. (Photo courtesy of the Cannoneer)

it's permissible to relax standards and discipline because "we accomplished our mission." Although not spoken, this lax attitude can permeate a unit. With a clear chain of command in place, continue to enforce standards and discipline.

Many reintegration tasks and Soldier/family issues cross-over into Army Force Generation reset; follow-through to ensure successful completion. Too often, continuity is lost with leader changes. When leaders change, include a green-tab discussion on Soldiers into a deliberate transition timeline. For changes of command, leaders must ensure there is a thorough transition of critical information. "Essential elements of information include Soldier issues; high risk individuals; Soldier's medical issues (such as exposure to concussive events), known family issues, expectations regarding assignments and schooling, unit wounded warriors and gold star family members associated with the unit." (See General Peter Chiarelli, Memorandum for Senior Leaders dated 22 December 2009.)

Remember, the Army trend is a spike in incidents on or about redeployment plus 60 days. Do not assume drugs do not exist in your organization. Conduct aggressive, unpredictable urinalysis testing early and schedule military dogs for barracks inspections. Enforce leader presence in the barracks on weekends and holidays. Soldiers must reside in a safe, healthy living environment. Continue to follow those "at risk" who may need assistance and ensure plans are adequate to manage their stress effectively, such as counseling with a unit chaplain or brigade family life counselors.

Provide the unit an updated vision and goals. Establish a predictable battle rhythm and balance immediately after block leave. Soldiers and family members are sensitive to predictability especially after a long deployment. Publish a battle rhythm and training calendar so Soldiers and families have it. With block leave over, conduct family oriented events during the duty day; plan unit events where families are welcome. Families need to recover just as deliberately as your Soldiers and equipment.

Plan a redeployment event such as a dinner and make a big deal out of it for families. Recognize the many great people who made the unit mission a success such as family readiness group leaders and the rear detachment command team. Plan, resource and promote opportunities for married couples to strengthen their relationships and

single Soldiers to become reacquainted into healthy social activities. The Strong Bonds Program for single and married Soldiers is an excellent tool. Finally, restart and resource programs, such as Better Opportunities for Single Soldiers, community volunteer initiatives and informal unit socials or team building events.

The Army exists to preserve peace and security, to implement national objectives, to serve and provide for the defense of the American people. These objectives have been accomplished for more than 234 years by the Army, during more than 183 campaigns. Our military forces are involved in Iraq and Afghanistan, conducting counter-terrorism and security operations. Defense Base Closure and Realignment Commission decisions are being implemented through transformation, transitioning from a Cold War to expeditionary force and supporting homeland security. As it executes these vital tasks, it also must restore balance among an all volunteer force in an era of persistent conflict.

The next few years are critical as these programs come to fruition and

"Adaptable and resilient Soldiers and families do not happen by chance."

troop adjustments are made with Iraq and Afghanistan. Army leaders, beginning with first-line supervisor, appreciate the expeditionary nature of the Army and are eager to accomplish their missions. Inherent in the missions however, leaders must understand and address the human dimension — our Soldiers and families. Failure to appreciate a holistic approach to reintegration ultimately will diminish combat capability one Soldier, one family at a time. Adaptable and resilient Soldiers and families do not happen by chance. It requires Soldier commitment and continued earnest leader involvement throughout the deployment cycle.

According to a survey conducted by the University of North Carolina at Chapel Hill, "Army assistance with the deployment and reunion process can be helpful, but at this time, this assistance is not rated very highly by spouses. Similarly, unit support for families can be helpful in the reunion process, but this support is not considered to be very strong. It is clear from the data that significant gains in reunion adjustment can be fostered but more attention must be given to strengthening family, unit

and service systems support if these gains are to be realized." (Dennis K. Orthner, Ph.D. and Roderick Rose, M.S., "Reunion Adjustment among Army Civilian Spouses with Returned Soldiers," Army Family Reunion Report Orthner & Rose, 2005, The University of North Carolina at Chapel Hill, December 2005. Although dated by four years, the findings are still relevant.) Reintegration must be done deliberately and with the same planning detail and execution focus as combat or stability operations.

This article does not contain any revelations. It simply highlights the significance of reintegration against a backdrop of an Army in flux. To underestimate the importance of a holistic approach to reintegration is to misjudge the challenge presently facing the Army in an era of persistent conflict. To simply wait until redeployment to address reintegration is shortsighted. The symptoms cannot be dismissed: suicide, substance abuse, divorce and increased behavioral health issues.

In addition to the many service programs in place, approaching reintegration holistically is a method at the tactical level to address these symptoms, and it begins upon unit notification of a deployment. Reintegration is not a panacea; it must be part of a comprehensive strategy. It requires critical thinking. Success involves implementation by the world's best NCO Corps. Success includes the same heightened sense of purpose, determination and proud tradition displayed throughout the Army's history. Ultimately, the spirit and strength of the Army Family will prevail. Leaders foster this strength, a faith in camaraderie, by demonstrating commitment in actions to Soldier and families.

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Forging Sabre 2009



A crew from the Singapore army fires a rocket from a High-Mobility Artillery Rocket System (HIMARS) on Fort Sill, Okla., Nov 9, 2009. The live fire was conducted during operation Forging Sabre which was a joint operation between the U.S. Army and the Singapore army. Members of the Singapore military were trained on the HIMARS system by members of 1st Battalion, 158th Field Artillery, Oklahoma Army National Guard. Training culminated in a joint exercise utilizing multiple combat systems. (Photo by SSG Matthew Lima, U.S. Army)

2009 Forging Sabre: Combined, joint exercise shakes up Fort Sill

"THIS EXERCISE IS A CULMINATING POINT FOR US, BECAUSE IT SHOWS [WHAT] THE WORLD-CLASS JOINT FIRES CENTER FORT SILL REPRESENTS NOT ONLY TO OUR NATION BUT ALSO GLOBALLY. FOR THE SINGAPOREANS TO COME HERE IS A GREAT TESTIMONY TO THE CAPABILITIES AND THE TRAINING RANGES WE HAVE HERE."

**MG DAVID D. HALVERSON
COMMANDING GENERAL OF FORT SILL AND
THE FIRES CENTER OF EXCELLENCE**

**By LTC Charles D. Kirby,
Chief, G-35 Future Operations,
Fires Center of Excellence
and Fort Sill**

Exercise Forging Sabre 2009, an integrated strike exercise, conducted by the Singapore Armed Forces was held at Fort Sill, Okla., from Oct. 12 through Nov. 24, 2009.

This exercise was a historical first in that it boasted a wide range of assets deployed as compared to its predecessor in 2005, making it the biggest and most complex live firing and air-land integrated strike exercise to date, according to the Singapore Armed Forces.

Forging Sabre is held bi-annually at locations throughout the world. Singapore, an island nation slightly smaller than New York City, because of urbanization doesn't have enough room to conduct an exercise of this magnitude on their home soil, so in recent years, Singapore has held the exercise in Australia, Africa and Twenty-nine Palms, Calif.

It was an opportunity to execute a strategic combined arms operation from Oct. 12 through Nov. 30 culminating in a combined arms live fire exercise Nov. 15-17 and was designed to validate Singapore Armed Forces' provisional integration and tactical doctrine. Singapore's military might is made up of army, navy, and air force assets and personnel, and is collectively known as the Singapore Armed Forces.

The Singapore Armed Forces recently purchased the High-Mobility Artillery Rocket System (M142) for one of its artillery battalions. Because Fort Sill is the home of the Fires Center of Excellence and the Field Artillery School, a Singapore

Armed Force contingent, made up of more than 540 soldiers and airmen from the Singapore Armed Forces, which included an AH-64 Apache helicopter detachment, an F-16C/D fighter detachment and a CH-47 Chinook helicopter detachment, traveled to Fort Sill to validate their training with a live-fire exercise which incorporated both U.S. and Singaporean forces.

Support was provided by the Fires Center of Excellence, the 75th Fires Brigade, 214th Fires Brigade, 428th Field Artillery Brigade and 479th Field Artillery Brigade, all from Fort Sill, and the 1st Battalion, 158th Field Artillery from the Oklahoma Army National Guard. In addition, other agencies of the Fort Sill Garrison provided support for the exercise, including the Henry Post Army Airfield, the Fort Sill Range Control Division, Fort Sill Directorate of Logistics and the Directorate of Plans, Training and Mobilization.

The exercise gave U.S. Soldiers and members of the Singapore Armed Forces valuable experience in working together in a combined operation. Fort Sill also has 29,000 square miles of joint military-controlled airspace and 47,000 acres of maneuver space to rehearse joint fight tactics, a luxury that Singapore doesn't have.

It made sense for the new HIMARS soldiers to validate their training with the U.S. Army's fires experts because Fort Sill has the best Joint and Combined Fires training capabilities available. It also gives U.S. Soldiers valuable experience training in a combined environment. It was win-win for both countries.

This was the Republic of Singapore's largest combined military strike which brought more than 600 Singaporean airmen and soldiers to Fort Sill. The exercise

involved transport helicopters, F-16 fighters and unmanned aerial vehicles.

Future wars will almost certainly involve joint and combined operations. We can see this in Afghanistan today where the U.S. Army is not fighting alone. The Fires Center of Excellence looks for opportunities to bring joint and combined training here because it exposes our Soldiers, and the leaders we are developing, to the operational environment they will be exposed to in the real fight.

"This is a hallmark event for a great coalition partner to demonstrate the joint and combined capabilities that we see here," said Maj. Gen. David Halverson, Fort Sill and Fires Center of Excellence commander. "I believe this is a great venue to plan and rehearse Forging Sabre; it's important to do this because it really does forge this one team approach."

Lessons learned. It took more than 1,000 pieces of equipment from radios, computers to unmanned aerial vehicles to make this exercise come to fruition. One of the biggest challenges of hosting an exercise of this caliber was making sure all the equipment, despite the myriads of frequencies used by the U.S. Army and Singapore Armed Forces were able to communicate with each other. Despite preparing for this exercise for well over a year, equipment was still being certified by the Federal Communications Commission right up until the last minute. But now that we've gone through an exercise of this magnitude, standard operating procedures have been solidified and we now know what it takes to get all the different frequencies and equipment cleared by the FCC and synchronized.

Successes sustained. After five days of live-firing there were no accidents, injuries or safety issues. It was an efficient joint operation between the Fires Force and Singapore Armed Forces which enabled the Singapore Armed Forces to walk away with solid doctrine and improved capabilities. Working with the Singaporeans will translate to future coalition training opportunities.

"It's exactly what we want to see here in the future as we bring in more coalition partners," Halverson said.

Discussions are underway with European and Asian countries to conduct more joint training exercises in the Fort Sill area.



(CLOCKWISE) Exercise Forging Sabre participants gather with the High-Mobility Artillery Rocket System launcher as a backdrop to mark the completion of the exercise at Thompson Hill, Fort Sill, Okla., Nov. 17, 2009. (Photo courtesy of *the Cannoneer*) A Republic of Singapore air force pilot wears his unit patch on his flight suit during a gathering at Henry Post Army Airfield, Fort Sill, Nov. 14. (Photo by Jeff Crawley, *the Cannoneer*) BG Roger Mathews, commandant of the Air Defense Artillery School, talks with Singaporean airmen in a hangar at Henry Post Army Airfield, Nov. 14. (Photo by Jeff Crawley, *the Cannoneer*) A Singaporean AH-64 Apache helicopter fires rockets above Falcon Range at Fort Sill, Nov. 17. (Photo by James Brabenec, *the Cannoneer*)



Forging Sabre 2009

Billowing clouds of smoke rear up from the impact area near Thompson Hill as F-16 pilots deliver their munitions on target during the live-fire portion of Exercise Forging Sabre at Fort Sill, Okla. (Photo courtesy of *the Cannoneer*)

Full-spectrum artillery

By MAJ Richard L. Scott

With the emergence of irregular warfare as the dominant operating environment for the foreseeable future, the U.S. military's judicious use of force is central to the challenge of operating in these unconventional environments. The incorrect application of force at the tactical level may have strategic implications. Scientific advances in nonlethal weapons may serve to reduce the level of violence our service members receive and dispense, while performing operations characterized by asymmetric threats, complex or congested terrain and belligerents intermingled with noncombatants. This article introduces the term full-spectrum artillery as a subcomponent of nonlethal weapons and presents the case for the expanded use of nonlethal weapons by the field artillery community in irregular warfare.

The road to purgatory. If the road to hell is paved with good intentions, then the road to purgatory must be paved with indifference. The difference between the two, in field artillery's case, is that hell represents the demise of a great branch and purgatory represents marginalization. To be sure, the field artillery is not dead. There are hundreds of field artillerymen performing core missions in the contemporary operating environment, but the majority are performing nonstandard missions. This is due, in part, to the field artillery being slow to adapt to changing threats or the changing environment. While the Army deployed less frequently into conventional conflicts and more into stability operations and civil support operations, the field artillery did little to develop munitions appropriate for those operations. As a result, combatant commanders relied less upon the field artillery for fast and accurate indirect fires. They shifted priorities and resources and redirected thousands of field artillerymen into nonstandard missions, such as civil affairs, psychological operations and information operations, transporters and military police.

In "The Return of the King," MG Peter M. Vangel states, "Nine out of 10 (artillery) units are not performing core missions." This branch marginalization leads to core-skills degradation and skill set atrophy — both concerns pointed out by Vangel in his plan. While there is little doubt that a

nonlethal field artillery capability may have impacted operations in Iraq significantly during the initial invasion and subsequent Phase IV reconstruction efforts, there may be little demand for such a capability now. This does not mean that the capability is no longer needed; it just may not be needed in that area of operations. Field artillery leaders now have a window of opportunity to develop a nonlethal strategy as they prepare for future operations in other parts of the world. Without such a strategy, success will continue to be contingent upon the "flexible, adaptable and agile team players" cited in the campaign plan.

In addition to deploying field artillerymen into nonstandard missions, the term nonlethal fires has been incorporated into the field artillery vernacular. LTC Morgan Mann points out in his article, *Marketing Framework in Support of Non-Lethal Fires*, "Recently published field manuals such as *Stability Operations (FM 3-07)*, *Counterinsurgency Operations (FM 3-24/MCWP 3-33.5)*, and the Army's new *Operations (FM 3-0)* manual reference nonlethal fires as critical components to planning and executing operations; however, there is little in way of prescriptive help. There are doctrinal publications pertaining to information operations (FM 3-13 and JP 3-13) and nonlethal targeting, but these publications are focused on division and higher level units where there are dedicated staffs for nonlethal fires and effects. In addition to the lack of tools at the tactical level, we also lack much of the joint or service specific doctrinal language to communicate what 'nonlethal' or 'non-kinetic' fires and targeting are, and how they are suppose to affect the battlespace."

The effort by senior field artillery leaders to establish nonlethal fires as a doctrinal term for its nonlethal activities is problematic. It is not enough to park the cannons and rocket launchers, deploy the Soldiers trained to operate those weapon systems into various nonstandard roles and call their efforts nonlethal fires. It is the lack of a nonlethal artillery arsenal, in part, that has led to the ad hoc force transformation that we observe today. Once the field artillery successfully reestablishes itself as the "King of Battle" and incorporates a more robust (lethal and nonlethal) arsenal into the scheme of fires, branch marginalization will cease and maintaining core proficiencies and preventing skill set atrophy will become

little more than training objectives.

The way ahead. Despite its reputation for being a casualty producer, the field artillery does have limited nonlethal capabilities with its illumination and smoke rounds. However, both types of rounds are seen more commonly in conventional conflict and usually precede high-explosive or improved-conventional munitions. What the field artillery lacks is an abundant staple of nonlethal options for use in irregular warfare, and therein lies the point of entry for nonlethal weapons proponents. The paper "Joint Concept for Non-Lethal Weapons" by General R. Steele, U.S. Marine Corps, identifies dozens of nonlethal options either currently available or being developed.

The nonlethal weapons fall into two large categories—counter-personnel technologies and counter-materiel technologies. Counter-personnel technologies include agents for crowd and riot control, personnel debilitation, facility clearing and area denial for personnel. Counter-materiel technologies include agents for area denial to vehicles and vessels and facility obstructions. A third, smaller, category involves counter-capability assets that are designed to disable or neutralize buildings or other mechanical/electrical facilities. Murdoch University Electronic Journal of Law produces another very useful reference that describes most of the nonlethal weapons as well as the legalities associated with their use at www.murdoch.edu.au/elaw/issues/v7n2/sautenet72_text.html.

Field Manual 6-30 Tactics, Techniques and Procedures for Observed Fire states, "When it is necessary for the observer to adjust fire, he must select an adjusting point." Full-spectrum artillery is that adjusting point. The field artillery lacks an arsenal that can be applied across the full spectrum of conflict adequately (See figure 1 on page 41). Full-spectrum artillery provides a graduated capability that currently is nonexistent. Full-spectrum artillery includes the development and application of all lethal and nonlethal munitions for use in cannons, rockets and/or missile launchers across the full spectrum of conflict (See figure 2 on page 41).

Imagine being able to deploy indirect fire assets in a way that still produces a desired outcome without causing irreversible damage. In Rwanda, electro-magnetic pulses fired from howitzers, rocket or missile launchers could have quashed radio broadcasts urging genocide.

In Macedonia, the field artillery might have fired malodorants or dyed foam coupled with personnel-capturing nets to help ground troops capture those who attacked the U.S. embassy in 1999. Full-spectrum artillery might have made a difference if NATO targeted Serbian command and control centers and jammed TV broadcasts and radio towers, similar to how the U.S. employed electro-magnetic pulses over Iraqi power stations during Operation Desert Storm. Field artillery assets could have delivered rapid hardening foams to deter assaults, and the subsequent looting, of the Iraqi National Museum in Baghdad in 2003.

When combined with well trained and well placed ground troops, full-spectrum artillery could have a profound effect on how wars are fought. Miscommunications and misunderstandings might not yield more than a bruise or hurt ego, and mistakes will not result in death. Reestablishing structures and services would require minimal resources, communities would remain intact and coalition efforts could be directed toward investments and improvements, rather than rebuilding and damage control.

Field artillery leaders now must determine how to integrate existing and developing technologies into the field artillery arsenal to provide combatant commanders an enhanced capability to defeat enemy actions. Fortunately, much of the work has already been done. The Joint Non-lethal Weapons Directorate, out of Alexandria, Va., has developed many of the technologies discussed in this article and has linkages into the Department of Defense bureaucracy. Department of Defense Directive 3000.3 Policy for Non-Lethal Weapons, mandates the establishment of a joint service organization responsible for the development and employment of nonlethal weapons, defines nonlethal weapons and designates the Commandant of the U.S. Marine Corps as the executive agent for the program. The Joint Non-lethal Weapons Directorate's mission is to facilitate outfitting the warfighter with operationally effective nonlethal weapons. The field artillery community may choose either to establish a headquarters collocated with the Joint Non-lethal Weapons Directorate or to establish a satellite office, possibly at Fort Sill, Okla. The field artillery then would oversee development, evaluation and recommendation of nonlethal projectiles,



Soldiers assigned to Bravo Company, 2nd Battalion, 77th Field Artillery Regiment, 4th Brigade Combat Team, 4th Infantry Division, prepare to fire an M119 light-tow howitzer during live-fire training at Combat Outpost Monti in the Kunar province of Afghanistan, Dec. 2, 2009. (Photo by SGT Teddy Wade, U.S. Army)

Figure 1: The spectrum of conflict

Increasing violence



Figure 2: Full spectrum artillery

Increasing violence



systems and platforms for both the air defense and field artillery communities for use in full-spectrum operations.

Any efforts to lobby further research into the full-spectrum artillery concept will not be easy, as current nonlethal weapons funding is historically negligible in comparison to the entire U.S. Department of Defense budget. According to the Department of Defense Office of Management and Budget, wartime spending continues to grow and has more than doubled from fiscal year 2001 (\$316 billion) to fiscal year 2009 (\$662 billion). *National Defense Magazine* states that nonlethal weapons comprised only .010 percent (approximately \$65 million) of the total 2009 budget. This is about the equivalent of one-twentieth of a B2 Bomber, half of a V-22 Osprey, about three AH-64D Apache helicopters or about a company of M-1 tanks.

As the wars in Iraq and Afghanistan approach the \$1 trillion mark, one must accept that lobbying for funds will be difficult, and the program will be looked at with skepticism. Any added funds allocated for full-spectrum artillery either will contribute to an already mounting debt or come at the cost of other systems.

Future fires. The future of the field artillery should not be a choice between two bleak options (demise and marginalization). There is another option, and with it, the possibilities are incredible. By choosing full-spectrum artillery, senior field artillery leaders will embark upon a journey into unexplored territory. Indirect fire nonlethal munitions will be an important step toward

rethinking how armies deploy and fight wars. The 2004 Force Application Functional Concept states, "The shifting military environment is likely to see greater mixing of enemy combatants with noncombatants and there are likely to be situations where lethal force is undesirable. Increasing non-lethality widens the range of effect the joint force is able to achieve without using deadly force."

As the U.S. military becomes less engaged with conventional conflict and more with irregular warfare, a greater need will emerge for developing the appropriate skills and weapons. Tactical operations will become less about death and destruction and more about establishing security and rule of law and restoring government power.

There remains little doubt that nonlethal weapons are an effective resource for those seeking to curb the effects of catastrophic damage associated with lethal munitions. Any weapon that reduces collateral damage to property or reduces the potential for killing noncombatants is beneficial in counterinsurgency. The difficulty lies in responding with just the right amount of force. Respond too lightly and risk unacceptable levels of military and civilian casualties and a loss of various forms of legitimacy associated with the mission. Respond with too much force and risk losing the moral high ground, public support and/or support of the population. Full-spectrum artillery may provide some answers for these tactically and strategically complicated problems.

This article concludes that full-spectrum

artillery might prevent field artillery branch marginalization, curb catastrophic damage and potentially change the way the U.S. military approaches irregular warfare. Nonlethal fires can enhance the efforts of American forces in conflict and post-conflict environments and should be integrated into current military operations. If the U.S. integrates full-spectrum artillery into its operations, it is likely that our allies and other nations will follow. If the U.S. casts doubt on the efficacy of full-spectrum artillery in hostile operating environments, it is likely to impede the development and deployment of these weapons. To be sure, future fires should be as flexible, adaptable and agile as the Soldiers tasked with employing them.

Major Richard L. Scott serves as the fire support officer for 21st Cavalry Brigade (Air Combat) at Fort Hood, Texas. His combat experience includes service as the chief engagement officer for the Multi-National Corps-Iraq (III Corps) reconciliation and engagement cell; the Counter-Rocket, Artillery and Mortar task force integrator for XVIII Airborne Corps and Multi-National Corps-Iraq; and as a current operations officer and battle captain for the Combined Joint Special Operations Task Force in Afghanistan. He commanded B Battery, 6th Battalion, 32nd Field Artillery (MLRS) at Fort Sill. He holds a master's of arts in Security Studies (Stabilization and Reconstruction) from the Naval Postgraduate School in Monterey, Calif.

Fires

PHOTOGRAPHER'S GUIDE

We are always looking for photographs that tell the stories of today's field artillerymen and air defense artillerymen. Here are some guidelines you can follow to give us high enough resolution photographs in formats we can use.

Shoot the picture at the highest resolution possible. Set your digital camera on the largest image size and the highest quality resolution the camera will allow. The highest resolution settings usually are called 'high,' 'super fine' or 'ultra-high.'

Cameras set at 'standard' or 'basic quality' can sometimes produce images only good enough for websites or Microsoft PowerPoint presentations, not publication in a magazine. Just because a photograph looks good on your computer screen does not mean it is printable in *Fires*.

At *Fires*, we need high-resolution digital photographs. The photographs should be no smaller than 2 megapixels, which is approximately 4-by-6 inches at 300 pixels per inch or 16-by-24 inches at 75 pixels per inch. For magazine covers and larger feature photographs, we prefer 6 megapixels or more, which is approximately 6.5-by-10 inches at 300 pixels per inch or 26-by-40 inches at 75 pixels per inch.

We can use tif, but we prefer photographs saved as a jpg. When saving a file as a jpg, choose a 'quality' setting of 'maximum' or '10' and the 'format option' of 'baseline (standard).'

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And, please, don't try to increase the resolution of the small, low-resolution photograph you've shot. Shooting a one megapixel image and increasing the pixels per inch after you've shot it will not make the image clearer or more usable — it only will make the image larger. You are limited by the resolution setting at the time the photograph is taken.

Do not place the photographs in Microsoft PowerPoint or Word and send them to us. They are unusable in those formats.



SGT Jeremy D. Pitcher of the 145th Mobile Public Affairs Detachment captures images of Soldiers of 1st Battalion, 37th Field Artillery, 3rd Striker Brigade Combat Team, 2nd Infantry Division, firing rounds to calibrate an M777 howitzer at Forward Operating Base Warhorse, Diyala province, Iraq, Dec. 8, 2009. (Photo courtesy of Joint Combat Camera Center Iraq)

Send us the digital photograph. Following the first two steps may result in a large file for each photograph.

Do not send more than 20 megabytes per email. You can send several photographs in multiple emails. Include caption information (when, where and who's doing what—including each person's rank, full name and unit) for each photograph attached and the title/name of the associated article/author. Also include the photographer's full name, rank and unit for credit in the magazine.

This information can be embedded in the photograph properties or sent as a separate text document. To embed information in the photograph properties, right click on the photograph's icon; scroll down and select 'properties;' click on the 'summary' tab; type the information in the 'summary' window; click 'apply' and close the 'properties' window. *Caution:* unless you are using Adobe Photoshop software to embed information, only the information typed in the 'summary' window that is visible when you first open the 'summary' screen (without scrolling down) will be saved.

You also can mail your photographs. We accept photographs saved on either a CD or DVD.

All submissions become the property of the magazine and cannot be returned.

Magazine information. If you have questions about shooting digital photographs, contact the *Fires* staff at DSN 639-5121/6806 or commercial 580-442-5121/6806. Our email is firesbulletin@conus.army.mil.

Our mailing address is *Fires*, P.O. Box 33311, Fort Sill, Oklahoma 73503-0311. If you want to overnight your photographs to us, the address is Building 758, Room 7, McNair Road, Fort Sill, Oklahoma 73503-5600.

Fires Bulletin photo contest. This edition contains the winners of the *Fires* Bulletin 2009 Photo Contest beginning on page 49. Rules for the *Fires* Bulletin 2010 Photo Contest can be found on page 56 of this edition.

Eating Soup with a Spoon: The employment of Fires brigades in the Global War on Terrorism

By LTC John C. Hale

"Fires brigades have become the Army's 'utility in -fielders' and force providers of choice for those missions because of their functional adaptability and multi-functional capability."

Samuel R. White

Lieutenant Colonel (Retired) John A. Nagl in his book *Learning to Eat Soup with a Knife* describes the complexity and difficulty in adapting a conventional army to combat an insurgency. A military also must not forget its fundamental capabilities and doctrine. A historical assessment of how the U.S. Army is employing field artillery and Fires brigades in Iraq and Afghanistan is a study in how the Army has forgotten its fundamental doctrinal principles. Fighting our current wars based on limited counterinsurgency and stability doctrine and ignoring Army and joint operations doctrine, fails to use all tools available to combat our current threat. It also highlights that the Army is not applying a holistic approach to combat operations and bridging the gap between counterinsurgency operations and high intensity conflict.

An evaluation of the employment of Fires brigades shows the potential for increases in field artillery competencies in both counterinsurgency operations and high intensity conflict, and increasing the lethal and nonlethal effects in the current conflicts in Iraq and Afghanistan.

The Army may solve the conundrum of *How to Eat Soup with a Knife* by simply using the right tool for the right job — a

spoon. Through looking at Army and joint doctrine, the capabilities of Fires brigades and applying doctrine and capabilities to the conflict, the Army could increase its effectiveness throughout the spectrum of conflict.

Envision an Army unit capable of operating in a joint and combined environment, capable of synchronizing lethal and nonlethal fires, while conducting full-spectrum operations, possessing the organic capability to support attached forces and with a span of control equivalent to that of XVIII Airborne Corps during Desert Storm ("The Fires Brigade — a critical capability in an era of persistent conflict," a white paper by Samuel R. White). The mission of a Fires brigade is to plan, synchronize, and employ joint and combined fires in support of a division, corps or combined joint task force. These missions previously were conducted by divisional artillery and corps artillery and now fall to the Fires brigade (*Field Manual 3-09.23 Modular Fires Battalions*). A Fires brigade is a multi-functional headquarters capable of being a force Fires headquarters or combined arms headquarters ("Fires Brigade," White).

The Fires brigade can conduct full-spectrum operations with attached air

or ground maneuver forces. It can operate across the full spectrum of conflict, including stability operations, security force operations and foreign internal defense. The Fires brigade has several key elements that give it the flexibility to receive assigned or attached units, including an organic brigade support battalion and signal company. Transforming field artillery brigades to Fires brigades increased both the size and capability of the headquarters. Fires brigade headquarters are organized with lethal effects, fire control, information operations, air support, air defense airspace management and topographic sections. These sections have the full suite of Army Battle Command Systems enabling the brigade to have a span of control that is limited only by the density of forces assigned or attached (*Field Manual 3-09.23 Modular Fires Battalions*).

Fires brigades have seen their missions and core competencies decay following Army transformation into a brigade-centric organization ("The King and I: the impending crisis in field artillery's ability to provide fire support to maneuver commanders," a white paper by Sean MacFarland, *et al*). This is due, in part, to the nature of counterinsurgency warfare and to Fires brigades' use in a myriad of secondary missions. There is a belief in the military that artillery units are not suited to counterinsurgency warfare (See "Field Artillery in Military Operations Other Than War: An Overview of the U.S. Experience," a paper by Lawrence Yates). Fires brigades are being deployed piecemeal, without using their true full-spectrum capabilities (see "Fires Brigade," White). This has resulted in the fragmentation of unit command and control and the atrophy of core field artillery skills and Fires brigade headquarters' competency in full-spectrum operations.

LTG William B. Caldwell stated, at the 2008 Fires Seminar at Fort Sill, Okla., "As former Army Chief of Staff General Shinseki once said, 'Warfighting is about fires and maneuver — fires enable maneuver; maneuver enables fires. You can't have a discussion on just one of those principles. Close supporting indirect fires destroy the enemy, suppress the enemy's capabili-

ties and then protect our forces.'" Caldwell's statement is not directed at only high intensity conflict, but full-spectrum operations, including counterinsurgency operations. With an understanding of Fires brigades capabilities, senior leaders can realize how operations can be enhanced through their employment. Army and joint doctrine form the foundation of employment for all military units. The emerging doctrine of Fires brigades' employment is not well known, nor is their organization and capabilities. A comparison of doctrinal references shows where efficiencies can be gained by fully employing Fires brigades on the battlefield, as opposed to their current piecemeal employment throughout a theater of operation. The current practice of deploying only pieces and parts of a Fires brigade results in the loss of an entire brigade for 18 to 24 months without maximizing the capabilities of the entire brigade or fully using its true capabilities to integrate and synchronize Fires. (See *Field Manual 1-02 Operational Terms and Graphics*). The current cycle of deployments for many units is one year on and one year off. Deploying only one-third of a unit during this cycle means the entire unit is unavailable for deployment over a two year period. The employment of forces in accordance with doctrine may help commanders mitigate risk while maximizing the Fires brigades' capabilities regarding Fires employment.

Before assuming his duties as commanding general of International Security Assistance Force, GEN Stanley A. McChrystal stated an intention of his command in Afghanistan is to "reduce civilian casualties in Afghanistan." The major cause of civilian casualties in Afghanistan is the delivery of munitions by aircraft ("NATO airstrike in Afghanistan kills up to 90" an Associated Press story by Frank Jordans). International Security Assistance Force is a multinational force operating at the combined joint task force level in Afghanistan, encompassing both the strategic and operational levels of war, yet it has no dedicated Fire support echelon supporting operations across the country. International Security Assistance Force is not a standing corps or theater headquarters, adding to the difficulty of integrating fires into operations and the command and control of various Fire support assets in a multinational environment ("Integration of Lethal and Nonlethal Fires: the future of the joint fires cell," monograph by Dewey A. Granger).

The field artillery as a branch has been described as a "dead branch walking" and in search of its role for eight years (King and I, McFarland). A way ahead is for Fires brigades to educate the Army and joint force on their full-spectrum nature and on the capabilities they bring to any battlefield across the spectrum

Soldiers of 2nd Platoon, B Battery, 1-321st Airborne Field Artillery Regiment, fire a round during a calibration mission at Forward Operating Base Clark, Afghanistan, Nov. 28, 2009.

(Photo courtesy of 1-321st Airborne Field Artillery Regiment)

of conflict. The solution for increasing effectiveness of troops in the field, economical use of forces available and enhancement of effective unit employment is to deploy Fires brigades as complete units. This option brings to bear the counterinsurgency operations capabilities of a brigade and the lethal and nonlethal integration needed during any full-spectrum engagement.

Fires in Operations Iraqi Freedom and Enduring Freedom. The employment of Fires brigades and corps/division fire support operations in Iraq and Afghanistan highlight both the versatility of Fires brigades and identify the need for fire support augmentation at the corps and division levels. The employment of 18th Field Artillery Brigade, 41st Fires Brigade and 17th Fires Brigade in Iraq, highlight the Fires brigades' capabilities to operate as a maneuver headquarters or conduct security operations in a counterinsurgency operations environment. No Fires brigade as a whole has deployed to Afghanistan; however the 25th Infantry Division Artillery was employed as a maneuver headquarters in Afghanistan. The 18th Fires Brigade currently has multiple units deployed to Afghanistan but without its brigade headquarters, brigade support battalion and signal company. Corps and division fire support operations in Iraq and Afghanistan show weaknesses in fire support structure specifically related to fire control. Case studies of Fires brigade employment in Afghanistan and Iraq identify considerations for the employing Fires brigades and some best practices for the augmentation and support of corps and division operations (monograph by Dewey A. Granger).

The deployment of 17th Fires Brigade and 41st Fires Brigade highlight several fundamental considerations when employing a

Fires brigade for full-spectrum operations. First is the difference in structure between a Fires brigade and a brigade combat team. Fires brigades lack several key enablers organic to a brigade combat team, specifically the military intelligence and engineer companies. Second, the staff structure of a brigade combat team is more robust than a Fires brigade. Engineer and civil affairs sections are not authorized in a Fires brigade headquarters. Third, the deployment of a Fires brigade should include its signal company and brigade support battalion. Omitting these units leaves the Fires Brigade Headquarters unable to communicate or support assigned and attached units. Using the principals of war as evaluation criteria, the deployment of 17th Fires Brigade and 41st Fires Brigade meet the criteria of maneuver, unity of command and economy of force. The employment of field artillery units as maneuver forces integrates fires and maneuver within the brigade's area of operations. The inclusion of attached and assigned units in the deployment meets the unity of command. Economy of force is met by maximizing the employment of all brigade units in its mission. All assigned brigade forces were committed in support of the brigade's mission with no forces underutilized.

The 18th Fires Brigade Headquarters deployed a small detachment from the brigade headquarters to support Multi-National Division-Baghdad, in addition to supporting Afghanistan with two batteries of 155-mm howitzer (3rd Battalion, 321st Field Artillery), a High-Mobility Artillery Rocket System battery (3-27 Field Artillery) and a target acquisition battery (D Company, 26th Field Artillery), all splitting command and control of the brigade. The brigade headquarter detachment's mission was ostensibly to



Soldiers of 2nd Platoon, C Battery, 1-321st Airborne Field Artillery Regiment, fire a round from their M777A2 howitzer in Afghanistan in 2009. (Photo courtesy of LTC John C. Hale)

“The irony of the need for Fires brigades is that they are not being utilized fully, yet commanders and leaders believe they are fully committed.”

perform a force field artillery function. During a pre-deployment site survey, the mission became providing augmentees to various division staff sections. The largest element in the mission was to augment the division's Iraqi security force cell. The headquarters (minus) mission was staff augmentation of seven division staff elements. The personnel deployed on this mission were under the command and control of their various sections and not linked together in any way. The deployment of 40 personnel from 18th Fires Brigade Headquarters, out of a deployable strength of 120 personnel used 35 percent of the headquarters. The remaining 65 percent was, therefore, combat ineffective and unable to deploy in support of other required missions.

The employment of 18th Fires Brigade in Operation Enduring Freedom identifies a common problem of how Fires brigades are being deployed throughout the Central Command area of responsibility. It was deployed in piecemeal fashion and fails to meet the evaluation criteria for maneuver, economy of force and unity of command. Certain elements of the brigade were used to their maximum capability (3-27 Field Artillery and D/26th Field Artillery), but the brigade as a whole was underutilized and did not maximize its ability to support maneuver through fires. The deployment of 18th Fires Brigade fails maneuver by lacking an integration of maneuver and fire support in its area of operations.

The employment of specific units within the brigade shows a lack of synergy in this synchronization, specifically having the brigade headquarters augmenting a division staff with no significant fire support functions and the lack of a synchronizing element for fires in Afghanistan theater of operations. Economy of force was not met through the lack of employment of all combat power available. The brigade headquarters, brigade support battalion and signal company were not employed to maximize their capabilities and used during the deployment. Although several brigade elements were deployed, 60 percent of the brigade remained in the U.S., leaving its capabilities unused and unable to function fully as a unit. Unity of command was not met through the piecemeal employment of the brigade across two theaters with no central focus. The brigade's units were dispersed to perform a myriad of tasks without a central focus for the brigade's main effort. The units and individual Soldiers were used to augment deployed units, dispersing their effectiveness and lacking a common purpose and mission. The deployment did not engage the brigade's combat power toward any common objective and left the brigade working for many commanders across two theater of operations.

The organization of division artillery and a modern Fires brigade is significantly different. The 25th Infantry Division's division artillery performed a full-spectrum maneuver mission in Afghanistan despite these differences. The deployment of the division artillery as a full-spectrum force met the evaluation criteria of maneuver, economy of force and unity of command. It operated as a maneuver headquarters, integrating fires and maneuver across its area of operations, using its attached force while providing fire support functions and fire support augmentation to the division.

The division artillery managed not only a maneuver mission, but fire support coordination across the division's area of operations. The deployment and mission met the definition of economy of force by maximizing the full spectrum capabilities of the head-

quarters, using all headquarters assets to their full capabilities and highlighting the flexibility of field artillery headquarters to perform both maneuver and fire support tasks simultaneously. Unity of command was met by the employment of the headquarters as the focus of development and security within the division area of operation, controlling all provincial reconstruction teams and synchronizing development activities in the division area.

Colonel Dewey A. Granger suggested several solutions to the future of the joint fires cell and the coordination of lethal and nonlethal fires. Noticeably absent from his recommendations are the capabilities and employment of a Fires brigade to enhance the coordination of joint fires in an area of operation. The irony of the need for Fires brigades is that they are not being utilized fully, yet commanders and leaders believe they are fully committed. The demand for Fires brigades COL Granger referenced was in fact only fires augmentation cells, not complete Fires brigades (Integration, Granger).

COL Granger identifies three case studies in his monograph regarding corps and division fires and joint effects cells in Operations Iraqi Freedom and Enduring Freedom. His first is Combined-Joint Task Force-76 in 2004 to 2005. He highlights the need for the corps artillery headquarters to augment the joint fires and effects coordination cell. He also identifies the nature of the joint fires and effects coordination cell as “an *ad hoc* organization designed to meet the requirements of the emerging environment because doctrinal fires cell manning did not support the current full-spectrum environment.” His second is III Corps Headquarters in 2006 to 2008. One of the functions identified to be performed during this deployment was force field artillery headquarters, a function doctrinally to be performed by a Fires brigade.

The creation of the III Corps joint fires cell for this deployment was possible through the use of subordinate and garrison units' augmentation of the corps staff. The significance of this deployment and the creation of the III Corps structure is “the necessity to relook the (III) Corps Headquarters design in support of future operations.” The third operational example was 10th Mountain Division serving as Combined-Joint Task Force-76 in Afghanistan. The organization and manning at the division level regarding fire support was very limited. Limitations on the division's ability to conduct counter fire, targeting, fire planning and the management of fires assets required the use of augmentees. 10th Mountain Division identified the need for a Fires brigade to support its operations, but was unable to secure one for the Afghan theater due to the “high demand for Fires brigades in Iraq (Integration, Granger).”

The Fires brigade and corps and division artillery case studies review the missions Fires brigades are conducting in Iraq and Afghanistan and could result in gaining additional efficiencies in both the Army's employment of Fires brigades and the mitigation of the weakness in current corps and division fire support capabilities (Integration, Granger). The Fires brigade modular organization allows it to perform a myriad of tasks in addition to its primary mission of synchronizing lethal and nonlethal fires. Mission profiles suitable for a complete Fires brigade include a field artillery headquarters or a full spectrum maneuver headquarters. The organization of Fires brigades is virtually identical in command and control capability to that of a brigade combat team. Through their combat experience in



A Soldier of 4th Battalion, 42nd Field Artillery pulls security while Iraqi police officers work in Baghdad, Iraq. (Photo courtesy of LTC James Frick, U.S. Army)

Iraq and Afghanistan, field artillery Soldiers are far more capable of conducting full-spectrum operations than ever before (Fires Brigade, White). However, the combination of both technical fires skills and the practical counterinsurgency skills found in Fires brigades are being underutilized and underemployed for both operational and tactical commanders. The conclusions drawn from the historical examples of the deployment of Fires brigades and corps and division headquarters highlight the positive and negative employment of Fires brigades and the requirement for augmentation of deployed corps and division headquarters.

Conclusions and recommendations. The Army underwent many significant changes in the past decade, including shifts in doctrine, force structure and missions. Army doctrine in 2001 adopted full-spectrum operations as the primary concept of force employment. The transformation of Army forces from a division-centric force to a modular brigade-centric force occurred during just six years. The missions of many units in the Army have evolved due to the nature of the ongoing conflicts in Iraq and Afghanistan. Units now fulfill nonstandard missions, performing tasks they were neither designed nor trained to accomplish.

These three changes would be difficult to accomplish in peacetime, yet the Army adapted and accomplished all three during an era of persistent conflict. Despite the successes of doctrinal changes, transformation and evolving missions, several areas for improvement are clear after evaluating the employment of Fires brigades in Operations Iraqi Freedom and Enduring Freedom. These areas consist of Army and joint doctrine, field artillery doctrine, force structure for the Fires

brigades, best practices for employment of Fires brigades and future International Security Assistance Force operations in Afghanistan.

The deployments of Fires brigades have not mitigated the weaknesses in the corps and division fire support structures to maximize the effectiveness of fires integration at the operational level. Weaknesses identified through multiple deployments of corps and division headquarters in both Operations Iraqi Freedom and Enduring Freedom have been identified and require redress. An assessment of Fires brigade employment is not complete without a review of the employment of corps and division headquarters in Operations Iraqi Freedom and Enduring Freedom — the headquarters Fires brigades were designed to support.

Army and joint counterinsurgency operations and stability doctrine should be reevaluated with respect to fires integration and synchronization and the role of the Fires brigade at the tactical and operational levels. Specific disconnects between the Army's concept of full-spectrum operations and the integration of fires exists. Counterinsurgency and stability doctrine do not nest with the concept of full-spectrum operations for the Army. *Field Manual 3-24 Counterinsurgency* fails to reference the importance of synchronization of lethal and nonlethal fires in counterinsurgency operations and highlights only lethal operations for fires. Joint doctrine has a similar flaw. Although *Joint Publication 3.0 Joint Operations* highlights the integration of fires across the spectrum of conflict, fires is noticeably absent in joint

doctrine for stability and foreign internal defense doctrine. *Field Manual 3.09-24 The Fires Brigade* states the Fires brigade is the provider of all functions previously held by the corps artillery and division artillery at both the tactical and operational levels. Yet these principles are not consistent across both Army and joint doctrine. Joint doctrine must address the role of Army Fires brigades at the operational level because it is the only organization that performs the fires function at the Joint Forces Command level.

Fort Sill must educate the force on Fires brigade capabilities. The Field Artillery Campaign Plan must include an information operations component for Fires brigades. As the Fires brigade proponent, Fort Sill is positioned best to educate through the Army school system and to educate both field commanders and Army leaders that Fires brigades are capable of conducting full-spectrum operations. Field artillery tactical doctrine manuals must be finalized following transformation as well.

Many field artillery doctrinal publications are still in draft form on the Fires Knowledge Network through the Army Knowledge Network portal. These manuals span the entire spectrum of fires tactical units from battery operations to Fires brigade operations. This is also true for fire support doctrinal references at the division and corps level.

The lack of updated doctrinal references creates a significant gap in knowledge for leaders and the force on the employment of fires while conducting full-spectrum operations. Doctrine is not a panacea or a single source of knowledge, but it does provide the foundation for education in the force regarding mission and capabilities with the Army. Doctrine also provides a point of departure for the application of forces in full-spectrum operations and counterinsurgency operations specifically.

The force structure of Fires brigades should be enhanced for conducting full-spectrum operations as defined in *Field Manual 3.0 Operations*. The authorization of several additional positions in the brigade headquarters would benefit full-spectrum operations and enhance the core missions of Fires brigades in the synchronization of lethal and nonlethal fires. Military intelligence capability should be increased to allow enhanced targeting for both lethal and nonlethal fires. Adding a civil affairs officer and engineer officer would enhance a brigade's ability to synchronize fires, both lethal and nonlethal. These minor force structure changes would enhance a Fires brigade's ability to perform full-spectrum operations and enhance the brigade's capability to perform both traditional emerging role as a full-spectrum force.

The 41st Fires Brigade and 17th Fires Brigade deployments provide models for employing Fires brigades. Fires brigades are capable of full-spectrum operations, yet are being used as force providers, while not using their full capabilities. Business rules for employing Fires brigades should be established to maximize their employment in any environment. A recommendation for these rules would be to evaluate Fires brigades holistically, bringing all their forces to bear versus the deployment on only certain units while leaving other units in the U.S. The major consideration for deploying a Fires brigade for full-spectrum operations is the lack of several key elements/units present in a brigade combat team. Deploying modular Fires brigades supports current operations and the sustainment of full-spectrum capability for Fires brigades

through the use of all combat power elements. Deployment of complete Fires brigades allows the full spectrum of by functions to be performed at the brigade. The sustainment and command and control competencies are as important to Fires brigades as the delivery of fires.

International Security Assistance Force is standing up an operational-level headquarters, the International Security Assistance Force Joint Command. This command should consider the employment of a Fires brigade at either its operational level or at the division tactical level. Both levels of command could benefit from a Fires brigade's capabilities. Expansion of International Security Assistance Force operations — including forming an International Security Assistance Force Joint Command — and a possible increase in forces for Afghanistan show an emerging opportunity for Fires brigades to be employed in a manner similar to Iraq, conducting full-spectrum operations; allowing commanders to 'Eat soup with a spoon.'

GEN McChrystal may determine that a Fires brigade is necessary to coordinate and deconflict the increasingly complex operating environment of Afghanistan. A Fires brigade is an option for an increase in forces for International Security Assistance Force, putting increased combat capability into the theater and increasing coalition forces' capabilities to command and control these forces. Deploying a Fires brigade would give International Security Assistance Force a dedicated command to coordinate, synchronize and deconflict fires at the operational level.

Implementing these recommendations will increase the effective employment of Fires brigades in full-spectrum operations. Revising Army and joint doctrine related to fires in counterinsurgency and stability operations would nest with fires employment articulated in *Field Manual 3-0* and *Joint Publication 3-0*. Field artillery doctrine

must be published to aid commanders on the employment of fires units, specifically Fires brigades.

Force structure for the Fires brigades should be enhanced to increase their capabilities to integrate lethal and nonlethal fires. Best practices for deployment of Fires brigades should be established to maximize their employment and capabilities. International Security Assistance Force should request a Fires brigade in Afghanistan to synchronize fires better in that complex environment. Adoption of these recommendations enhances both the full-spectrum capabilities of Fires brigades and the ability of commanders to accomplish their missions.

“Force structure for the Fires brigades should be enhanced to increase their capabilities to integrate lethal and nonlethal fires.”

Lieutenant Colonel John C. Hale, Field Artillery, is a fellow at the Advanced Military Studies Program at Fort Leavenworth, Kan. His last assignment was brigade S-3, 18th Fires Brigade, Fort Bragg, N.C. He has served as a field artillery and psychological operations officer at the platoon through brigade/group levels. He has deployed to both Operations Iraqi Freedom and Enduring Freedom, serving in planning and leadership positions in Combined Joint Task Force-180, and Multi-National Corps-Iraq. He also served in Operation Iraqi Freedom as battalion executive officer for 3rd Battalion, 321st Field Artillery at Forward Operating Base Abu Gharib. His next assignment is division G5, 101st Airborne Division (Air Assault), and he will deploy to Afghanistan in 2010.



SPC Graylan Luchey of P Platoon, Headquarters and Headquarters Battery, 1st Battalion, 7th Field Artillery, 2/1 Infantry Division, prepares to enter an apartment near Camp Victory, Iraq, Nov. 18, 2008. (Photo by CPT Mark Peek, U.S. Army)

2nd Place Combat/Stability Operations



Soldiers of 5th Section, A Battery, 2-8 Field Artillery, fire their M777A2 howitzer at Forward Operating Base Warhorse, Diyala, Iraq, Apr. 15, 2009. (Photo by MSG Troy J. Bouffard (Retired), U.S. Army)

3rd Place Combat/Stability Operations



Bravo Battery, 4-25 Field Artillery, 3/10 Brigade Combat Team, conducts an air assault mission out of Forward Operating Base Airborne, Wardak, Afghanistan, Feb. 2009. (Photo by MAJ Scott Ringwald, U.S. Army)

1st Place Training



During a battalion field training exercise, SSG Daniel Carr of A Battery, 3rd Battalion, 6th Field Artillery, 10th Mountain Division, 1st Brigade Combat Team, collects his thoughts and sets his squad before conducting searches on a nearby building, June 3, 2009. (Photo by PFC Blair Neelands, U.S. Army)

2nd Place Training



Outside of his conventional artillery training, SPC Carlos Garcia of A Battery, 3rd Battalion, 6th Field Artillery, 10th Mountain Division, 1st Brigade Combat Team, peeks through a wall to pull security during the battalion's field training exercise, June 3, 2009. (Photo by PFC Blair Neelands, U.S. Army)

3rd Place Training



SPC Carlos Garcia of A Battery, 3rd Battalion, 6th Field Artillery, 10th Mountain Division, 1st Brigade Combat Team, prepares to install a fuse on an artillery round during a combined live-fire exercise at Fort Drum, N.Y., June 3, 2009 (Photo by SSG John P. Queen, U.S. Army)

Fires Bulletin 2010 Photo Contest

This annual contest obtains high-quality photos that tell the story of today's U.S. Army and U.S. Marine Corps field artillery and U.S. Army air defense artillery units and Soldiers conducting training or engaged in full-spectrum operations. These photos may appear as a cover or other shots for future editions of the magazine, as part of the Fires Center of Excellence poster series or in other esprit de corps or strategic communications projects. The competition is open to any military or civilian, amateur or professional photographer.

Two Prize Categories — Six prizes. A first place prize of \$500, second place prize of \$200 and third place prize of \$75 will be awarded in each of two categories: (1) training for combat/stability operations and (2) actual combat/stability operations. Winning photos will be posted on the magazine's website at sill-www.army.mil/firesbulletin.

Rules. Photos not meeting the following rules will be disqualified:

- Only photos taken between 1 July 2009 and 30 June 2010 are eligible.
- A maximum of three photos per photographer can be submitted.
- Photos can be entered only by the photographer who took them.
- Each entry must meet the requirements of the specified category and be received by the magazine no later than 1 August 2010.
- Each photo must be a color jpg or tif image with little or no compression.
- Each photo must be taken with a camera with a resolution of five megapixels or better on its highest resolution setting (jpg image file size should be greater than two megabytes in most cases). Photos cannot be manipulated to increase resolution.
- Images cannot be manipulated other than the industry standard for darkroom processing, such as dodge, burn, crop, etc., as per Department of Defense Directive 5040.5, "Alteration of DoD Imagery."
- Each submission must include the photographer's name, unit/affiliation, email address, mailing address and phone number. Caption information must include who, from what unit, is doing what, where and when (date) in the photograph — for example: "SGT Joe B. Smith, C/2-20 Fires, 4th Fires Brigade, fires the M777A2 howitzer during unit qualification training at Fort Hood, Texas, Jan. 5, 2010."
- Photos cannot be copyrighted or owned by an agency/publication; the image must be cleared for release and publishable in the magazine.

Judging. A panel of editors, professional photographers and military personnel will select winners. The judges' decisions will be final. Judging criteria is as follows.

- Power and impact of the message that the image conveys
- Composition, clarity, lighting, focus and exposure of the image
- Creativity and originality

Submissions. All submissions may be used at the discretion of the magazine staff. Photos can be sent by email or compact disk (CD). CDs will not be returned.

- Email image files (one image per email) to Fires Bulletin at firesbulletin@conus.army.mil. Mark the subject line as "2010 Photo Contest/Photo #1 (2 or 3), Entry Category — Your Last Name."
- Each entrant must email his or her rank, full name, mailing address (permanent preferred), phone number and a secondary email address for contact purposes.
- Mail CDs to ATTN: Photo Contest at P.O. Box 33311; Fort Sill, OK 73503-0311.
- FedEx or UPS submissions to Building 758, Room 7, McNair Road, Fort Sill, OK 73503-5600.

Questions. Contact the Fires staff by email at firesbulletin@conus.army.mil or by phone at DSN 639-5121/6806 or 580-442-5121/6806.



Fire support for the special operations task force

By Majors Jason D. Adams,
Deric Holbrook and
Seth Knazovich

Today's special operations forces joint fires element program was born out of successful rotations of dedicated field artillery captains and sergeants first class to fill joint manning document positions. Early in Operation Enduring Freedom, special operations task forces recognized the need for resident expertise within their headquarters to coordinate and integrate fire support. Successes in Operation Enduring Freedom led planners for Operation Iraqi Freedom to take on a similar staffing approach in their operations for the combined joint special operations task forces in Iraq.

In 2003, Combined Joint Special Operations Task Forces-West had resounding success integrating joint fires because of their joint fires element. These successes prompted coordination between the U.S. Army Forces Command, U.S. Army John F. Kennedy Special Warfare Center and School, Fort Bragg, N.C., and the field artillery branch at Human Resources Command, Alexandria, Va. The result was a formal proof of concept that started the test bed at the 7th Special Forces Group (Airborne) in October 2004.

Selection. In late 2004, the field artillery selected three captains and a major to help establish a new special operations forces joint fires element in the 7th Special

Forces Group (Airborne). The addition of these four officers was the final complement of personnel to the three sergeants first class and a chief warrant officer three, who already had deployed as part of 7th Group's inaugural rotation to Afghanistan and had gained invaluable experience that would shape the way the joint fires element would support special forces groups.

To prepare them for their assignments to 7th Group, the field artillery required the officers to attend the Joint Firepower Course at Nellis Air Force Base, Nev., and the Joint Air Tasking Order Process Course at Hurlburt Field, Fla., in an effort to get the joint fires element started correctly.

Special operations forces joint fires element formal education. The Joint Firepower Course is a two-week course that teaches joint concepts, procedures and techniques for integrating air and surface weapons from all services. The course focuses on planning at the battalion through corps levels and coordinating joint air-ground operations within the Theater Air Control System and the Army Air-Ground System. The course places additional emphasis on joint combat airspace management and Army airspace command and control, which are crucial for special operations forces joint fires element operations.

The Joint Air Tasking Order Process Course is a three-week course that focuses on specific battle management functions to integrate air and surface resources into joint combat operations.

The course provides an understanding of coordination considerations performed primarily at the joint air operations center and associated joint and component facilities. Understanding the air tasking order process and how it supports the ground forces enables the fire support officer and NCO to use the system better to aid the commander and his staff during mission planning.

The Special Operations Terminal Attack Controller Course is a three-week course at Yuma Proving Grounds, Ariz., and is taught by the U.S. Army John F. Kennedy Special Warfare Center and School. This course trains personnel in the tactical and technical skills, and operational procedures necessary to effectively utilize rotary-wing and fixed-wing close air support assets in support of special operations forces missions. Personnel train on the capabilities and limitations of U.S. aircraft, munitions, lasers and ground marking equipment, and night and urban close air support. Upon completion of all required training, that includes a minimum of 12 live aircraft controls, the student earns the designation of joint terminal attack controller.

Fire support mission. The mission of the special operations forces joint fires element is similar to a fire support element at the brigade and division levels. The special operations forces joint fires element coordinates primarily with all forms of joint fire support into special operations forces operations. This includes, but is not limited to, close air support; rotary-

Photo courtesy of U.S. Army John F. Kennedy Special Warfare Center and School Public Affairs

wing attack aviation; U.S. and coalition forces conventional ground-based fires, radars, target acquisition and electronic warfare assets; nonstandard intelligence, surveillance and reconnaissance; platform integration; naval surface fire support; and terminal guidance operations. In addition to coordinating and synchronizing fires, the special operations forces joint fires element is the primary agent for training fire support to Special Forces personnel.

Garrison training. Fire support training in garrison is another demand competing with all of the other tasks and missions that special forces battalions or companies have to address. It is essential that the joint fires element incorporates fire support training at whatever level possible to maximize exposure. Training opportunities for fire support range from classes on close air support, call for fire, and incorporating artillery and mortar live fire into company level direct action missions.

Each of the battalion's 18 Special Forces Operational Detachments-Alpha will require introductory and continuing training on fire support tasks. Since 18-series personnel come from a variety of backgrounds within the Army, the level of proficiency and familiarity with fire support can vary greatly between teams.

The limiting factor in all training is time. It is the most valuable resource and should not be squandered. Fire support training must be incorporated for the battalion and group into operations as much as possible. Each battalion will have ongoing missions, both stateside and within the regionally aligned countries, for that specific group. Along with those missions are deployments to the two major theaters of Afghanistan and Iraq.

Southern Command. 7th Special Forces Group (Airborne) has worked with the Colombian military for many years. The addition of the special operations forces joint fires element has not only benefited the special forces groups, but also has enhanced the long-standing relationships with regional partners. For instance, the 1st Battalion Joint Fires Element worked closely with elements of a Colombian special forces brigade. The brigade commander wanted his mortar platoon to

train on fire support planning and mortar live fire; the task fell upon the shoulders of the joint fires element. After coordinating with the partnered Special Forces Operational Detachment-Alpha and Colombian army leadership, a program of instruction was developed and executed. The program more closely integrated the mortar platoon into fires planning for the platoon's assigned mission. A live-fire exercise served as the capstone event.

Another example of integrated training between the Special Forces Operational Detachments-Alpha and the Colombian military was a joint fires training exercise that 3rd Battalion conducted by in July 2005, and involved the first AC-130 live fire training in Colombia.

Combat fire support execution. Counterinsurgency operations in Afghanistan or Iraq require U.S. special forces to array themselves in many small firebases with their host nation partners across a large operational area. This dispersion, coupled with the small unit formations, in which special operations forces operate, increases their requirements for joint fire support assets. The special operations forces joint fires element helps special operations task forces plan, coordinate, synchronize and integrate this fire support into the special operations forces' scheme of maneuver.

One example of this was the coordination and joint planning that resulted in two Canadian M777, 155-mm howitzer sections being placed in direct support of the special operations task forces operating in southern Afghanistan for more than 30 days. U.S. special forces and an Afghan battalion established a temporary operating base in northern Kandahar to conduct long-range patrols across an area with little to no Coalition presence. U.S. special forces and Afghan forces were to operate outside of the habitual footprint of coalition ground-based fire support systems. The joint fires element coordinated with the Canadian task force headquarters to deliver the necessary indirect fire support. These howitzers provided both lethal and nonlethal fires to Operational Detachments-Alpha and Afghan forces. Daily, these howitzers engaged targets for U.S. special forces and Afghan patrols. As

the operation progressed, the firebase began to receive frequent mortar attacks, possibly due to the effectiveness of the Canadian howitzers. In response, the Canadian task force provided a lightweight counter mortar radar. The radar allowed the Canadian fire direction center to translate point of origin data into fire missions quickly, resulting in an effective counterfire system.

U.S. special forces elements also conducted operations in United Kingdom controlled provinces. When these teams made contact with enemy forces, they received support from both United Kingdom light howitzers and Guided Multiple-Rocket Launch Systems. The responsibility to integrate these assets also fell on the joint fires element. Because of routine face-to-face and telephonic coordination by the joint fires elements with the United Kingdom task force, timely deconfliction of fires through layers of command and control was possible. This resulted in the rapid clearance of fires and fire mission approval for U.S. special forces elements.

The Combined Joint Special Operations Task Forces-Afghanistan also has U.S. M119 howitzer systems in direct support of U.S. special forces at firebases in southern and eastern Afghanistan. These howitzers proved invaluable during troops-in-contact situations, providing counterfire, high explosive and illumination fires. This has become an enduring relationship, continuing for almost three years and multiple unit rotations. Howitzer sections in support of U.S. special forces often fired more rounds than all of their combined counterparts who were supporting conventional units in Operation Enduring Freedom. Also, Special Forces Operational Detachments-Alpha routinely use their own organic mortar systems (60-mm, 81-mm, 120-mm) in support of their own combat operations. In Operation Enduring Freedom, 120-mm mortars are located at many of the U.S. special forces firebases and used to extend the indirect fire range of an Operational Detachment-Alpha in excess of seven kilometers. They use these systems, not only as a part of base camp defense, but, also, as a part of their basic loads during mounted combat patrols.

Each Special Forces Operational

“The limiting factor in all training is time. It is the most valuable resource and should not be squandered. Fire support training must be incorporated for the battalion and group into operations as much as possible.”

Detachment-Alpha has a joint terminal attack controller, and it is the joint fires element's responsibility to receive and process all air support requests for close air support and electronic warfare assets from all joint terminal attack controllers within the special operations task force. The joint fires element tracks all air support requests from submission by the joint terminal attack controller through the air tasking order process. If the request is supported, the joint fires element informs the joint terminal attack controller about mission-related data such as aircraft type, call signs and time on station. Close air support accounts for the vast majority of fire support assets provided to a Special Forces Operational Detachment-Alpha due to the distances required and the limited availability of the other fire support platforms. For example, one special operations task force was supported with more than 500 pre-planned, non-troops-in-contact close air support sorties during an eight-month tour in Afghanistan.

Most of what has been described takes place within the operations center on the forward operating base. However, there are several missions that required the joint fires element to operate in the field, directly supporting Special Forces Operational Detachments-Alpha at their firebases. The following vignettes describe some of the events that took place in a joint fires element during combat rotations.

Two Special Forces Operational Detachments-Alpha were assigned to a firebase in one of Afghanistan's most contested provinces and were engaged

consistently by enemy forces whenever leaving the patrol base. The joint fires element proposed moving a 105-mm howitzer platoon from a relatively quiet firebase to this firebase to provide immediate fire support to the Special Forces Operational Detachments-Alpha. The fire support NCO assessed the firebase to determine whether or not the firing platoon could operate within the confines of the relatively small firebase and whether or not the Special Forces Operational Detachments-Alpha could support this addition.

Once it was determined that the firebase could sustain the additional unit, the joint fires element submitted a request to move a firing platoon to the firebase, and it was approved by the joint task force commander. The fire support officer conducted initial training and coordination between the firing platoon and the Special Forces Operational Detachments-Alpha at the firebase. The training included several live-fire missions while accompanying the Special Forces Operational Detachments-Alpha on combat patrols. The Special Forces Operational Detachments-Alpha became extremely proficient using their new fire support assets, and the lethality and overall effectiveness of that team significantly improved.

As qualified joint terminal attack controllers, the fire support officer and fire support NCO sometimes were called upon to augment the Air Force joint terminal attack controllers. In one such instance, the fire support officer provided joint terminal attack controller coverage for a Special Forces Operational Detachment-Alpha for 30 days because there was a

delay with the Air Force joint terminal attack controller's replacement. During this time, the fire support officer conducted combat operations with the Special Forces Operational Detachments-Alpha and requested and employed fixed-wing close air support and rotary-wing close combat attack assets into several firefights.

One other situation where having qualified joint terminal attack controllers within the special operations task force operations center proved invaluable was during the typical use of armed Predators to engage high-value individuals. This process involved watching the Predator video feed and communicating with the aircrew via My Internet Relay Chat while the special operations task force commander watched and provided constant feedback and guidance.

Operational Detachments-Alphas and -Bravos often work directly with the U.S. embassies in the country where they operate or train. Also, the battalion fire support officer can serve in an effects coordinator role on an Operational Detachment-Bravo staff within an embassy. Effects coordination for an Operational Detachment-Bravo or special forces battalion is vastly different from any conventional battalion or brigade because it requires working closely with the Department of State and many other government agencies. This requires an in-depth knowledge of joint and interagency capabilities and limitations to ensure the commander's desired effects are understood by all agencies involved in the region.

A direct example of this type of work occurred during the summer of 2006



An M119A2 crew from 3-319th Field Artillery Regiment (Airborne) puts rounds downrange in support of a Special Forces Operational Detachment-Alpha as a part of operations in southern Afghanistan in early 2005. (Photo courtesy of MSG Daniel M. Orr, U.S. Army)



A vehicle modified by the Afghan National Security Forces to fill the role of an indirect fire platform. (Photo by MAJ Deric Holbrook, U.S. Army)

when the 2nd Battalion fire support officer served as the effects coordinator at the U.S. Embassy in Bogotá, Colombia. During this deployment, the fire support officer worked with every agency in the embassy and gained approval from the U.S. ambassador to establish a joint interagency working group. This group was designed to facilitate intelligence and operations fusion for the embassy and the Operational Detachment-Bravo commander in support of the American hostage rescue in Colombia. Effect coordination was critical for this interagency and special operations specific mission. The special operations forces joint fires element fire support officer was integral to ensuring the commander achieved his desired effects.

There is a higher level of responsibility and expectations of a captain or a sergeant first class assigned to a special operations forces joint fires element. The joint fires element must coordinate fire support operations for a division-sized area of operations. He has 18 subordinate elements with joint terminal attack controllers who depend on his ability to plan and coordinate fire support assets for each of them. The joint fires element must have access to more intelligence and joint fire support assets than a typical conventional battalion or brigade combat team; and he must be able to manage it all concurrently 24 hours a day.

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Major Deric J. Holbrook, field artillery, is currently serving as the battalion operations officer for 2-12 Field Artillery, 4th Stryker Brigade Combat Team, 2nd Infantry Division forward deployed in support of Operation Iraqi Freedom. He recently served as a Stryker Brigade Combat Team fire support officer. Major Holbrook was the first fire support officer assigned to 2nd Battalion, 7th Special Forces Group (Airborne), Fort Bragg, N.C. He was a qualified joint terminal attack controller, and deployed with 2nd Battalion, 7th Special Forces Group (Airborne) in support of Operation Enduring Freedom – Afghanistan and Operation Enduring Freedom – Caribbean and Central America. He also served as the battalion assistant S3 operations officer, battalion fire direction officer and as a battery/

maneuver commander for 1st Battalion, 7th Field Artillery (Schweinfurt, Germany) in support of Operation Iraqi Freedom. Major Holbrook began his Army career with the 25th Infantry Division (Light) Hawaii where he served as an aviation brigade fire support officer, battalion fire support officer, company fire support officer, platoon leader and platoon fire direction officer. He is a graduate of the Command and General Staff College and holds a master's degree in International Relations from Webster University.

Major Jason D. Adams, field artillery, is currently the deputy fire support coordinator for 2nd Brigade Combat Team, 10th Mountain Division (Light Infantry). He was the first fire support officer assigned to 3rd Battalion, 7th Special Forces Group (Airborne), Fort Bragg, N.C. He also was a qualified joint terminal attack controller and deployed with 3rd Battalion, 7th Special Forces Group (Airborne) in support of Operation Enduring Freedom. He served as the battalion fire direction officer for 1st Battalion (Airborne), 321st Field Artillery and commander of C Battery, 1st Battalion (Airborne), 321st Field Artillery at Fort Bragg. He was a Stryker platoon leader, assistant brigade fire support officer for 2nd Brigade, 2nd Infantry Division and counter fire liaison officer to the V Republic of Korea Corps, while stationed at Camp Hovey, Republic of Korea. Major Adams served as a company fire support officer with A Company, 1st Battalion, 501st Parachute Infantry Regiment and the battery fire direction officer and executive officer for C Battery (Airborne), 4th Battalion, 11th Field Artillery at Fort Richardson, Alaska.

Targeting for a maneuver task force

By CPT Justino Lopez Jr.



Task Force 1-24 deployed from Fort Wainwright, Alaska, in September 2008. Like most other units, we inherited the previous unit's operational tempo and products. During more than 15 months in theater, it developed numerous great products that suited its needs. For example, it combined the targeting decision brief with the operations and intelligence brief on a weekly basis.

The beginning. For several weeks, we used this format for those briefs until we decided to separate them due to our inability to digest the massive amount of data. We also incorporated a targeting work group that focused on nominating targets to the battalion commander for approval in a bottom-up-driven format.

The battalion fire support officer chaired the targeting work group. The group involved key staff members, such as the battalion targeting officer, intel, civil-military operations, operations, a tactical psychological operations team and the company fire support officers. The company fire support officers were the company's representatives to the targeting work group. They relayed the commander's issues and nominated targets to be prioritized through the targeting work group.

We followed the 'decide, detect, deliver and assess' methodology for the targeting work group. It was important to have the company representatives at the targeting work group to get the bottom-driven intelligence and information that allowed the group to decide which targets were going to be prioritized and nominated to the battalion commander. We reviewed all of the ongoing projects, high-value individuals and current themes and talking points that existed for the problem sets within the battalion's area of operations. We also identified quantifiable measures of effectiveness and performance to assess the battalion's progress. These measures of effectiveness were based on the logical lines of operations — established in accordance with the commander's priorities and vision, which we simply termed lines of operations.

"Each [line of operations] represents a conceptual category along which the [host nation] government and [counterinsurgency] force commander intend to attack the insurgent strategy, and establish [host nation] government legitimacy" (*Field Manual 3-24 Counterinsurgency*). These measures of performance reflected our quantified actions to achieve the measures of effectiveness.

Problems. Although we made great progress with our targeting method, we encountered several problems. The targeting work group did not integrate the desired effects we were trying to achieve within our problem sets. Although we reviewed a list of high-value individuals, projects, specific issues within the area of operations, information operations themes to stress and terrain denial targets/kinetic strike packets, we did not tie them together. At times, we became overwhelmed by the sheer amount of information and spent too much time trying to prioritize them. Furthermore, we had many projects and humanitarian assistance drops occurring sporadically throughout the area of operations that didn't seem to be tied to a quantifiable effect — other than to help the Iraqi people. As a result, while we had a robust nonlethal system, its targeting was haphazard at best. It was apparent our projects and humanitarian assistance drops had to be tied to our desired effects.

Complications. Our targeting process and decision making was centered around high-value individuals and not on the root problems or target sets. The newly implemented Status of Forces Agreement and the employment of Iraqi jurisdiction (warrants, sworn statements, witnesses, etc.) further complicated our efforts to detain key enemy personnel. Tribal and political corruption (combined with infiltrated Iraqi Security Forces in many areas)

resulted in significant difficulties in personality-based targeting. Regardless, we had to respect the Iraqi legal system and stress the legitimacy of the Government of Iraq while operating within the legal framework of the Status of Forces Agreement.

Ideally, the targeting work group would produce a targeting fragmentary order that would be the driving force behind company operations. However, this was not the case for us. Because we focused on everything, in turn, we focused on nothing. The products we pushed to the companies were useful; however, we overwhelmed them with too much information.

Assessments. Measures of effectiveness and performance were reviewed weekly in the targeting work group to assess our efforts. We stumbled upon one issue — the quantified data from the measures of effectiveness and performance. The targeting work group created the quantified data and adjusted it as we thought necessary to accommodate each company's problem sets. For example, C Company was in an area where electricity was poor to nonexistent before the invasion of Iraq in 2003, while A Company was in an area where electricity was more prevalent before the invasion. We could not hold each area of operations to the same standard with respect to our sewage, water, electricity, academics, trash, medical, transportation and agriculture assessments. A specified increase in the hours of electricity per week could be reasonably attained by A Company due to the existing infrastructure, but not by C Company. The same could be said about the circumstances surrounding the transition of the Sons of Iraq to the Iraqi army. Based on the battalion's footprint, each company faced drastically different problems that were hard to tie up in neat and tidy measures of effectiveness.

End state. First, we had to understand the logical lines of operations the battalion commander established to achieve his desired end state. In our case, we focused on three logical lines of operations — security, governance and essential services. We compared the logical lines of operations to legs that hold a stool together. The stool, as a whole, represents the desired end state, but if one of the legs or logical lines of operations becomes loose or, worse, falls off — the entire stool or end state would fail. From this point, we determined what information requirements were necessary to determine which information gaps needed to be filled to achieve the desired end state.

The information requests would replace the measures of effectiveness and performance to alleviate any discrepancies with quantifying data that became apparent because of the diverse dynamics of each company's areas of operations. For instance, C Company focused more on the essential services logical lines of operations because of the extreme lack of such services. Bravo Company focused on the security logical lines of operations due to significant weapons caches and weapons trafficking in its area of operations. The following outlines the solution to our problems, using the decide, detect, deliver and assess model.

Decide. What are the problems? This ultimate question has to be answered. How do we prioritize these problems based on the battalion commander's priorities? To succeed, the targeting work group must identify problems in each battalion's area of operations and prioritize them for the battalion commander. This thorough analysis allows him to make a timely decision.

Once the problem sets were identified, we classified them as target sets. Examples include a specific town; tribal conflict or event; criminal organizations; or a particular aspect of sewage, water, electricity, academics, trash, medical, transportation and agriculture.

SGT Nigel Wongsing, attached to Guardians Maneuver Detachment, 17th Fires Brigade, pulls security during a joint patrol at the Route 6 Bus Station in Basra, Iraq, Dec. 4, 2009. (Photo illustration by Jason Kelly, *Fires Bulletin*. Original photo by SPC Samantha Ciaramitaro, U.S. Army)



Iraqi army soldiers prepare for a humanitarian assistance aid drop in a poor neighborhood that is tied to improvised explosive device/indirect fire activity in Alpha Company's area of operations. The food was funded by the U.S.; however, it was distributed by the Iraqi army to stress the information operations theme of Iraqis in the lead. (Photo by CPT Mike Schwille, U.S. Army)

Then, we determined the desired effect for the set. After the effect was determined, we identified specific targets — the first step in constructing the target synchronization matrix for each target set.

For example, a target set of an enemy indirect fire cell within Sinjar, Iraq, continues to launch rockets into Forward Operating Base Legion. Sinjar falls within A Company's area of operations. We wanted to achieve the following desired effect. 'The indirect fire cell is defeated and there is a decrease in indirect fire attacks against Forward Operating Base Legion. High value individual targets RL 1211 and RL 1230 are killed/captured/neutralized. Weapons and ammunition caches are exploited and destroyed. The people of Sinjar report indirect fire activities to the Iraqi security forces or Coalition Forces and support the Government of Iraq.'

Detect/deliver. We merged the detect and deliver aspects of the targeting cycle into one section. They involve actions to be taken by Coalition Forces to achieve the desired effect against the target set. Each applied asset must have a task and purpose for both lethal and nonlethal assets. This portion of the target synchronization matrix is the meat for the targeting fragmentary order and outlines the tasks to subordinate units that must be accomplished during the targeting cycle. The detect/deliver step also will alleviate numerous projects and humanitarian assistance drops that do not have a specific targeting effect. The bottom line is, 'what do our actions do for us, and what do they do for the Government of Iraq?' Tying this together with the target sets allows us to focus on the problem sets.

At times, target sets are not unique to just one company. The sets often bleed over into another company's area of operations or even be a battalion-level problem set. In this case, we apply all of the maneuver elements that are affected. For example, the indirect fire cell in Sinjar receives its ammunition from the southern town of Ba'aj, which is in B Company's area of responsibility. Therefore, B Company and all of its combat multipliers assets are used.

Assess. Now, examine how each asset applies to the target set individually. The indirect fire cell in A Company's area of operations would be categorized under the security logical lines of operations. However, when we look at the assets used to meet the desired effect for the indirect fire cell, we affect the governance and essential services logical lines of operations, supporting the idea that each logical lines of operations is equally important to achieve the end state. The information requests listed in the target synchronization matrix reference the questions that each asset should answer to assess whether our efforts were beneficial or detrimental to the problem set. The remarks section under 'assess' should discuss the answers to some of the information requests or any other issues for that particular target. The battalion commander can make his assessments based on the targeting work group's

assessments and provide further guidance to the targeting work group during the targeting decision brief.

This completes the target synchronization matrix for one target set. Each problem set within the area of operations is broken down by the companies for their specific problem sets and by the battalion fire support element for its specific problem sets that are bottom-up driven. This methodology results in a focus-driven targeting process for the battalion. Now, projects have a purpose and intent behind them. The same could be said for joint operations, key leader engagements and humanitarian assistance drops. They come together to meet the desired effect that is tied to the commander's desired end state for the logical lines of operations.

Targeting cycle. We use a two-week targeting cycle based on the operational tempo. The problem sets are dynamic and could take months to achieve results. We found we could not achieve the desired effects by targeting on a weekly basis. The targeting work group is chaired by the battalion fire support officer and includes the battalion executive officer, battalion targeting officer, S2, S3 plans, S9 (civil-military operations), S1 (public affairs officer), medical officer, civil affairs team, tactical psychological operations team and company representatives. The targeting decision brief to the battalion commander occurs every other week, however, the targeting work group meets every week.

During week 'A,' the targeting work group meets on Monday and reviews any updates that may influence the decision to prioritize new target sets for weeks 'B/C' as a recommendation to the battalion commander. Once we establish a new priority list for the target sets, we dedicate assets to that particular set and develop the target synchronization matrix. On Thursday, we brief the commander on our assessments and our recommendations for weeks 'B/C.' Once the commander gives his guidance, we publish the targeting fragmentary order with the changes and the new two-week tasking on Friday. The company commanders receive the fragmentary

order and have the opportunity during Saturday's operations and intelligence brief to present any issues or comments they have.

During week 'B,' we assess weeks 'Z/A.' We review all of the tasks assigned to the target sets and determine whether or not we achieved the desired effects. Obviously, the time to achieve the desired effects does not take place within two weeks, so most of the target sets do not change. However, this is a good opportunity to review the assets applied and dedicate or remove additional assets to the target sets. The updates to the delivery assets are applied for the next two-week cycle (weeks 'D/E') and briefed to the battalion commander in the decision brief in week 'C.'

During the decision brief, the battalion commander has an opportunity to assess recent progress from weeks Z and A. The format for the decision brief is to review the mission statement, commander's intent, logical lines of operation, information requests, S2 brief (air interdiction, area of operation and situational template, changes to the information operations themes and talking points, target sets (targeting work group assessments), recommendations for the next two week cycle and the commander's guidance. Each company's representative is present at this brief to provide information to the commander and to support the value of their recommended target sets.

Effects. Once we receive the commander's guidance, we publish the targeting fragmentary order. It is structured in the five-paragraph format. Under the execution paragraph, we distribute changes to the information operations themes and talking points. We also insert each target set from the target synchronization matrix. Each company pulls the information from the targeting fragmentary order and the battalion staff coordinates for assets. Now, the targeting fragmentary order becomes the driving force behind the battalion's combat operations.

Our targeting methodology is not 'the answer' to all targeting scenarios, but it serves as a way for us to capture the complexity of our operational environment. It allowed us to focus on the problems in our area of operations and tie together our lethal and nonlethal operations to achieve the battalion commander's end state. Target sets were determined by the targeting work group, and there were no limits to the assets you apply to the targets within the target set. Applying maneuver forces, unmanned aerial systems, civil affairs projects, humanitarian assistance drops, Q-36/Q-37/lightweight countermortar radar and human terrain teams to break down the human dynamics of the area of operations was easy to do. The key is to focus the assets on the desired effect and continually move forward on solving the problem sets encountered in a counterinsurgency environment. Our methodology was tailored to the battalion commander's needs and end state.

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Students at a girl's school in a poor neighborhood that is tied improvised explosive device/indirect fire activity in Alpha Company's area of operations wave their hands during a school supply drop. The Iraqi police conducted the drop to gain support of the local populace. (Photo by CPT Mike Schwill, U.S. Army)



Photo by TSgt. Eifren Lopez (U.S. Air Force)

By MAJ David Haynes

Historical perspective. The discussion of why we are now fighting a world war with a transnational Islamist group can be traced as far back as those practicing Christianity, Judaism and Islam have recorded history. For the purposes of this paper, the discussion is confined to World War I and beyond with a specific focus on the Middle East.

World War I. As the “Great War” came to a close, the end of colonialism began to draw near. The administration of colonies proved expensive in terms of personnel and money to the European and other powers that kept them. As an increasing number of Arab and Muslim lands gained independence in the interwar years, the European powers were reluctant to give up their influence in the region due to the economic impact of the trade routes and the discovery of oil. The Balfour Declaration and a host of meddling in countries from Egypt to Iran and Yemen to Afghanistan by Western powers from 1917 onward created a pro Zionist and anti-Islamic perception of Westerners and their governments among many in the Muslim world (See Charles Messenger’s book *The Century of Warfare: Worldwide Conflict from 1900 to the Present*).

Influences. The other catalysts for birthing extremism during this time were the close associations that rising Islamists were forging with fascists in Europe in the period between the first two World Wars. In the 1920s and 1930s, two influential leaders in the Muslim world sought favor from a likeminded force in the west, Adolph Hitler.

Mohammad Amin al-Husayni, the Mufti of Jerusalem, was active in the protest against the British Mandate of Palestine and very anti-Semitic. Husayni was so enthralled with Nazism that he recruited, trained and commanded Muslims in the Balkans as part of the Waffen-SS during World War II (Messenger). He identified greatly with the tenets of fascism and, like Muslim Brotherhood founder Hassan al-Banna, began to create a fascist view of Islam’s existence juxtaposed Israel and the West.

In his book *The Anatomy of Fascism*, Robert Paxton describes some of the distinguishing characteristics of a fascist movement. “Sense of overwhelming crisis beyond traditional solutions primacy of the group to which one’s duties are superior to every right, whether collective or individual and subordination of the individual to it. Belief that the group is a victim, or a sentiment that justifies any action sans moral or legal, limits against its enemies internal

and external. Dread of the group’s decline under the corrosive effects of individualistic liberalism, class conflict and alien influence. The need for closer integration of a purer community by consent if possible or by exclusionary violence if necessary. The need for authority by natural chiefs culminating in a chieftain who is capable of incarnating the group’s destiny. The beauty of violence and the efficacy of will when they are devoted to the group’s success. The right of the chosen people to dominate others without restraint from any kind of human or divine law, right being decided by the sole criterion of the group’s prowess within a Darwinian struggle” (220).

The linkage of the jihadists with fascism is easily seen and heard from their own propaganda in films like *Obsession* where you see each one of the tenets listed by Paxton displayed in Muslim media and education, and the jihadist are intent on making this the mainstream version of Islam. This adaptation of fascist thought has galvanized jihadist with two opponents and scapegoats to blame their problems and target for attacks, Israel and the West. The evolution of Jihadist Islam gives an indicator into an avenue to defeat it, which will be discussed later.

Muslim Brotherhood. The establishment of the Muslim Brotherhood was as a po-

litical organization, which, at first, may have sounded like a labor union, but it was wrapped in the shroud of ultra conservative religious belief. Hassan al-Banna, founder, believed by returning to a life of true Islamic following circumstance would improve for Muslims. Pan-Arabism and Pan-Islamis rose in the early days of the brotherhood as well, but the underlying tenet was the dictum that all facets of life come from the Quran. The organization went operational in 1954 with an attempt to assassinate Gamal Abdel Nasser, secularist President of Egypt (www.fas.org/irp/world/para/mb.htm).

The Muslim Brotherhood continues to operate and can be tied directly to the formation of al-Qaeda. Sayyid Qutb is often spoken of as another founder of jihadist ideology. His influence was so strong that jihadism is often called Qutbism. Qutb succeeded al-Banna as the brain of the Muslim Brotherhood understudy of al-Banna. Qutb's influence permeates much of the jihadist culture and is responsible for perhaps the two most dangerous men to study Qutbism. Ayman al-Zawahiri was so strongly influenced by the writings of Qutb that he joined the Muslim Brotherhood and later formed the group known as the Egyptian Islamic Jihad, which assassinated Egyptian President Anwar Sadat in 1981 (www.fas.org/irp/world/para/mb.htm). Qutb's influence was also present in the radicalization of Osama bin Laden, who studied under Sayyid's brother Mohammed Qutb at a university in Jeddah, Saudi Arabia. Osama bin Laden left within a month of the Soviets invading Afghanistan to see if this was a front for jihad (See Marc Sageman's *Understanding Terror Networks*, 26-29).

Al-Qaeda. Bin Laden teamed up with Sheikh doctor Abdullah Azzam and they formed the Afghan Service Bureau, MAK, as a force provider of mujahedin. Azzam recruited many Muslim Brotherhood members for service in the jihad against the Soviets. Later, the two fought side by side and purportedly spoke often with Azzam, providing the initial idea for forming al-Qaeda. Azzam and bin Laden forged the beginnings of al-Qaeda in 1987 and 1988. From its inception, bin Laden thirsted for power over the MAK and al-Qaeda. Bin Laden eventually broke from Azzam and stood-up his own training camps. When Azzam died, parts of MAK joined bin Laden, but the Azzam loyalists continued to quarrel with bin Laden (See Rohan Gunaratna's *Inside Al Qaeda*, 22).

Ayman al-Zawahiri met bin Laden for the first time not long after his acquittal from charges in the assassination of President Sadat in 1985. The meeting was in Peshawar,

Pakistan, where Zawahiri looked to fund the jihad and care for wounded mujahedin. Bin Laden was quite impressed with Zawahiri. Zawahiri occupies the post as leader of the Egyptian Islamic Jihad and is Osama bin Laden's deputy in al-Qaeda.

Their nascent jihadist organization had yet to declare war on America; they were busy with a war against the Soviets with indirect help from the U.S. In February 1989 when the Soviets withdrew from Afghanistan, bin Laden returned to Saudi Arabia with much respect. He helped Saudi intelligence provoke unrest against the communist regime in Yemen and returned to his family's construction business. But the warrior inside yearned for more fighting.

War on the West. On Aug. 2, 1990 when Iraqi forces invaded Kuwait, he offered his services to the Royal Saudi Family. Bin Laden was snubbed for a coalition of U.S., European and Arab troops. This act by the Royal Saudi Family turned his allegiance, and bin Laden began a campaign against the Saudi monarchy and espoused the removal of all Western leaning secular governments in Muslim lands and the expulsion of all infidels from the Holy Land. Al-Qaeda declared war on the West in 1991, but we did not listen for another 10 years (Gunaratna, 22).

In denial. Much like World War II where the indicators were present, governments did not want to lend credence to the threat, but, rather, appease it. The West is in denial as to the gravity of the threat of

radical Islam. The indicators are present; their desires are not secret. Indeed, the ideas have been proffered through media outlets. Yassin Musharbash, a staff writer for the German news publication "Spiegel Online" told how a Jordanian journalist talked about al-Qaeda's strategic vision through conversations with Abu Musab Al-Zarqawi while they shared some time in prison. Musharbash recounts the following phases in Fouad Hussein's book *al-Zarqawi: al-Qaida's Second Generation*.

Predictions. The first phase – known as "the awakening" – has already been carried out and was supposed to have lasted from 2000 to 2003, or more precisely from the terrorist attacks of Sept. 11, 2001 to the fall of Baghdad in 2003. The aim of the September 11 attacks was to provoke the U.S. into declaring war on the Islamic world and, thereby, "awakening Muslims."

According to Hussein, the first phase was judged by the strategists and masterminds behind al-Qaida as very successful. He wrote, "The battlefield was opened up and the Americans and their allies became a closer and easier target." The terrorist network also is reported as being satisfied its message can now be heard "everywhere."

The second phase – "opening eyes" – is, according to Hussein's definition, the period between 2003 and 2006. Hussein says that the terrorists hope to make the Western conspiracy aware of the "Islamic community." Hussein believes this is a phase in which al-Qaida wants an organization to



According to Fouad Hussein's book *al-Zarqawi: al-Qaida's Second Generation*, the aim of the September 11 attacks was to provoke the U.S. into declaring war on the Islamic world and, thereby, "awakening Muslims." Pictured is the exterior of the crash site following the attack on the Pentagon, Sept. 12, 2001. (Photo by Jocelyn Augustino, FEMA News Photo)

develop into a movement. The network banked on recruiting young men during this period. Iraq was to become the center for all global operations with an “army” set up there and bases established in other Arabic states.

The third phase – “arising and standing-up” – is supposed to last from 2007 to 2010. “There will be a focus on Syria,” Hussein prophesies, based on what his sources told him. The fighting cadres are supposedly already prepared and some are in Iraq. Attacks on Turkey and – even more explosive – in Israel are predicted. Al-Qaida’s masterminds hope attacks on Israel will help the terrorist group become a recognized organization. The author also believes countries neighboring Iraq – such as Jordan – are also in danger.

The fourth phase is predicted between 2010 and 2013. Hussein wrote al-Qaida will aim to bring about the collapse of the hated Arabic governments. The estimate is that “the creeping loss of the regimes’ power will lead to a steady growth in strength within al-Qaida.” At the same time, attacks will be carried out against oil suppliers, and the U.S. economy will be targeted using cyber terrorism.

The fifth phase will be the point at which an Islamic state, or caliphate, can be declared. According to the plan, between 2013 and 2016, Western influence in the Islamic world will be so reduced and Israel weakened so much, that resistance will not be feared. Al-Qaida hopes by then the Islamic state will be able to bring about a new world order.

Hussein believes during the sixth phase from 2016 onwards there will be a period of “total confrontation.” As soon as the caliphate has been declared, the “Islamic army” will instigate the “fight between the believers and the non-believers,” which has so often been predicted by Osama bin Laden.

The seventh phase is described as “definitive victory.” Hussein wrote in the terrorists’ eyes, because the rest of the world will be so beaten down by the “1.5 billion Muslims,” the caliphate will undoubtedly succeed. According to Hussein, this phase should be complete by 2020, and predicts the war won’t last longer than two years.

Surreptitious creation. The West is a victim of its own success in “World War III,” by so fervently opposing the Soviets that we helped the mujahedin and surreptitiously turned our backs on them, creating a deadly group of warriors with a religious calling to fight. In

search of an enemy, they found one when we ventured back into their lands at their request. While, from our perspective, we did not ask for “World War IV,” we are in it and the road to victory will be long.

The fight. Seth Jones and Martin Libicki, terrorism specialists with *The Rand Corporation*, a non-profit think tank helping to improve policy and decision making through objective research and analysis, propose all terrorist groups end because they use violence to achieve a political goal and seek political change. Jones and Libicki say most terrorist groups have ceased to exist because they joined the political process or were ferreted out by local police and intelligence and were either arrested or killed. The essence of what defeats terrorist groups who do not normalize into the political process needs to incorporate all the elements of national power – diplomatic, information, military and economic

“The West is a victim of its own success in ‘World War III,’ by so fervently opposing the Soviets that we helped the mujahedin and surreptitiously turned our backs on them, creating a deadly group of warriors with a religious calling to fight.”

– with the addition of intelligence operations and police work.

Policing and intelligence operations. A comprehensive strategy to combat al-Qaida and its affiliates is necessary. This is a whole of government approach that must be linked and synergized from the international level down to the local level. Jones and Libicki offer a two-front strategy. The first front is the policing and intelligence operations – an interagency effort – that must be mounted to share the requisite intelligence here and abroad to identify and track key leaders and their networks, exploit the intelligence gained and arrest them as the situation develops and warrants action. This will necessitate a decreased focus on counterterrorism by the Department of Defense and directing more resources to the agencies that conduct security cooperation such as the Central Intelligence Agency, Department of Justice and Depart-

ment of State. This is the long fight of the war because the intelligence network creation and intelligence gathering rely largely on human intelligence. These assets can take considerable time to develop (123).

Military force. The second front consists of the employment of military forces where al-Qaida is participating in or fomenting an insurgency. This does not necessarily mean that general purpose forces from the U.S. need be involved. Local forces can be augmented with Special Operations Forces and/or intelligence services to combat terrorist led insurgencies.

The use of local forces is optimum to the cessation of an insurgency since the indigenous forces must eventually be capable of securing the country themselves. Local forces have the home field advantage in intelligence collection and knowledge of the terrain. Legitimacy with the population of the local security forces can be a consideration for/against using the local forces. The situation will dictate; however, an indigenous force is best, (136-138).

The U.S. government should consider the cost benefit of responding with regular forces against terrorist threats. They arguably lend credence to their claim we are on another crusade to conquer Muslim lands. It also gives a focal point for recruitment of jihadists.

Information operations. The third front is the information operations. The West must counter the ideology of jihadism. Tacit approval by non-violent people is as bad or worse than complicit action. The West is easily 30 years behind in the propaganda campaign against the jihadists. They have had time to grow a generation that chants death to America, death to the United Kingdom and death to Israel (*Obsession*). But Westerners have no credibility in the Muslim world when issues of the Zionist conspiracy are discussed.

We must identify groups and leaders who are moderate in tone and supportive of peace and reconciliation. These can be tribal elders, respected journalists, clerics or anyone of influence. We must coopt these people and any organization to espouse our message through their words within the existing political, cultural, social and media outlets in the

Muslim world (Jones and Libicki, 133-135). While this is a war we are engaged, perhaps the U.S. characterization of this conflict as the War on Terrorism has given too much credence and status as holy warriors to those who should be classified as criminals.

Ending fascist ideology. The West can win "World War IV." Al-Qaeda is unlikely to overthrow any existing governments in the near term. And their propaganda campaign against the governments who tolerate the infidels have made enemies of most of the governments in the world. But our efforts to date have served only to prevent repeat attacks on U.S. soil. Al Qaeda has conducted more attacks and is present in more countries than prior to Sept. 11, 2001.

Western governments, militaries, police and intelligence services must understand the historical evolution of terrorism and jihadism in terms of ideology, political action and tactic employment. Westerners must take the politically correct blinders off and see a foe filled with hatred that opposes us and has a well-developed plan to take over the world. The world must espouse the ideal of tolerance of other cultures and religions. This with perseverance, diligence and patience will allow us to counter the latest perversion of fascist ideology.

Editor's note: This article was originally written for the U.S. Army Command and General Staff College.

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Moments in military history



In preparation for the invasion of Normandy, France, artillery equipment is loaded aboard landing craft tanks at an English port, June 1, 1944. (Photo courtesy of the U.S. Army Center of Military History)



These American troops are marching through the streets of a British port town on their way to the docks where they will be loaded into landing craft for the big assault at Normandy, France, June 1944. (Photo courtesy of the U.S. Army Center of Military History)

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PVT Jonathan Consford of 4th Battalion, 1st Field Artillery Regiment, 3rd Brigade, 1st Armored Division, tosses an ammo shell from the M119A2 howitzer during a live-fire exercise at Dona Ana Base Camp, N.M., Nov. 12, 2009. (Photo by MAJ Deanna Bague, U.S. Army)